CHAPTER TWO - DESCRIPTION OF ALTERNATIVES

2.1 INTRODUCTION

This chapter provides a detailed description of the five alternatives under consideration in this Environmental Impact Statement (EIS): A - No Action, B, C, D, and E - Proposed Plan Amendment. These alternatives address management direction for managing fire, fuels, and related vegetation resources — improving the health of Idaho Bureau of Land Management (BLM)-administered lands by facilitating the return of fire to its natural role in the ecosystem. This would be accomplished using various vegetation management approaches and adaptive management while also considering public safety, fire-fighter safety, protection of property, and communities-at-risk.

A range of alternative actions was developed to address issues and concerns expressed during the public scoping process (see Section 1.4, Identification of Relevant Issues). Five alternatives for this project have been developed with input from agencies and the public and have been evaluated in detail for their potential environmental impacts.

This chapter is organized as follows:

- The role of the BLM and participating agencies (Section 2.2).
- The process of alternative development (Section 2.3).
- The five alternatives and the issues that they were designed to address (Section 2.4).
- New fire direction implementation and the roles of monitoring, evaluation, and adaptive management in that implementation (Section 2.5).
- The alternatives that were considered for further analysis but eliminated, as well as rationales for their elimination (Section 2.6).
- Reasonably foreseeable future actions (Section 2.7) - Reasonably foreseeable future actions include those that have already been approved but not yet implemented, as well as those that can be reasonably anticipated for future proposal and implementation. Reasonably foreseeable future actions are analyzed in conjunction with the alternatives so as to assess cumulative effects.
- Alternatives, potential environmental effects associated with the alternatives, and management restrictions (Section 2.8).

2.2 IDAHO BUREAU OF LAND MANAGEMENT (BLM) COORDINATION

To ensure this EIS is in full compliance with other federal, state, and local agency requirements regarding the proposed fire and fuels management direction and to assist in developing alternatives, the BLM helped form an interdisciplinary (ID) team. The U.S. Fish and Wildlife Service (USFWS) and the Idaho Department of Fish and Game (IDFG) have participated in this planning effort since its initiation. The BLM also received input from Native American Tribes; U.S. Forest Service (USFS); National Parks Service (NPS); Idaho National Laboratory (INL);

Idaho Departments of Agriculture, Lands, Environmental Quality, Parks and Recreation; as well as individuals and local groups.

The BLM has provided the general direction for the ID team discussions, evaluations, and decisions. In conjunction with this direction, the ID team has provided oversight of the analysis process with the role of ensuring that the EIS contains the relevant information to meet the needs of the BLM and all other agencies involved.

2.3 DEVELOPMENT OF ALTERNATIVES

Alternatives considered for detailed analysis in an EIS are subject to a screening evaluation, which is intended to determine whether they meet the purpose and need for the project and whether they reduce potential environmental impacts, in this case to resources such as soil, vegetation, air quality, and health and human safety. Alternatives must also be technologically and economically feasible.

The BLM compiled a comprehensive list of the issues and concerns raised during public scoping (see Section 1.4, Identification of Relevant Issues). Most comments focused on potential environmental impacts and alternative management options. After public scoping, development of potential alternatives to address or incorporate these comments began, with resource-specific input from the BLM and participating agencies. Based on the screening criteria, a number of alternatives were eliminated from consideration (see Section 2.6, Alternatives Considered but Eliminated from Further Environmental Analysis), and five alternatives remain for detailed analysis in the EIS.

Although the resources and activities occurring in the planning area are administered by the BLM, participating agencies with specific concerns provided their input to the alternative development process. For example, the USFWS provided the technical information specific to federally listed threatened and endangered species (T&E) related issues. The BLM used this information in its decision-making process to ensure technically feasible alternatives were considered with regard to T&E species.

2.4 DESCRIPTION OF ALTERNATIVES

In accordance with BLM planning policies, alternatives are described with the same basic elements appropriate to land use plan (LUP)-level decision-making regarding fire management direction. These elements include the following:

- Landscape-level fire management goals and objectives, including desired wildland fire conditions.
- The suite of management actions that can be used to meet Desired Future Conditions (DFC), including areas that are suitable for wildland fire use (WFU) to benefit resources and areas where WFU is not appropriate due to ecological, social, economic, political, or resource constraints (*suitable* identifies those areas where that activity could occur but that actual implementation appropriateness would be verified through site-specific project analysis).

- Criteria used to establish fire management priorities.
- Restrictions on fire management practices, if any are needed to protect natural or cultural values.

Five alternatives have been developed to address the two issues raised during public and agency scoping (as described in Section 1.4, Identification of Relevant Issues) and are analyzed in detail. Each alternative is structured in the following manner:

- Assumptions - formulated to guide the development of each alternative.
- Goals/Objectives and Management Actions - Goals/Objectives related to landscape-level fire management, including DFC for fuels, vegetation, and wildland fire conditions, and management actions, strategies or actions that can be used to meet DFC.
- Prioritization Criteria - criteria for fire management presented in order of priority.
- WFU Areas - areas identified as:
  - Suitable for possible WFU for resource benefit, or
  - Not appropriate for WFU due to social, economic, political, or resource constraints.
- Treatment Levels - identified for analysis purposes for the life of the LUP amendment (until superseded or replaced through subsequent LUP amendments or revisions).
- Management Restrictions - placed on fire management practices (including both wildland fire suppression and fuels management) to protect natural or cultural resource values.

Certain aspects of the five alternatives are common to all alternatives, as well as other actions that are common to all action alternatives; they are summarized in the next section. The unique elements of each alternative are discussed subsequently, and alternatives are summarized in tables at the end of this chapter.

Alternative objectives and broad treatment levels (footprint-acres) are described in terms of treatments to the vegetation cover types found in the planning area. Vegetation cover types include: Low-elevation Shrub (including Perennial Grass and Invasive Annual Grass), Mid-elevation Shrub (including juniper encroachment), Mountain Shrub, Aspen/Conifer, Dry Conifer, Salt Desert Shrub, Vegetated Rock/Lava, Wet/Cold Conifer, and Riparian. Complete descriptions of these vegetation types are given in Section 3.2, Vegetation Resources and Fire's Natural Role (Issue 1).

2.4.1 FOOTPRINT-ACRES AND TREATMENT-ACRES

To aid with comparing the alternatives, treatment levels (footprint-acres) are identified by alternative in Chapter 4, Environmental Consequences. Because some BLM-administered land acres may burn and/or be treated multiple times to achieve management objectives, it is important to understand the difference between the terms footprint-acre and treatment-acre, which are used throughout this document. Footprint-acre(s) refers to a single area or acreage within which some intervention, manipulation, or treatment is/are performed. Treatment-acre(s) refers to the multiple interventions, manipulations, or treatments on the same footprint-acre(s) to achieve management objectives. Footprint-acres of a given area would never be greater than treatment-acres of that same area. However, treatment-acres may be equal to or greater than footprint-acres (Appendix A).

For example, if a farmer wanted to raise potatoes on a 1-acre parcel, he/she would first plant the potatoes, which would be the first pass over the 1-acre parcel. He/she would make a second pass to fertilize, a third pass to spray herbicides, and a fourth pass to harvest the potato crop. The farmer would have worked the same 1-acre (footprint-acre) parcel four times, which is the equivalent of 4 acres (treatment-acres) of treatment.

The following sections describe the activities that would be used to achieve the desired future conditions for vegetation identified in the various alternatives. This LUP amendments would allow for the use of various fire and related vegetation treatments to occur on public lands not meeting desired vegetative conditions as priority, opportunity, and funding allow. As such, this LUP amendment identifies areas *suitable* or *non-suitable* for various treatments (*suitable* identifies those areas where that activity could occur but that actual implementation appropriateness would be verified through site-specific project analysis). For example, this effort may identify broad areas where RxFire or wildland fire use is suitable; however, site specific analysis may identify other resource concerns that would make another treatment activity, such as mechanical thinning, more appropriate. For these reasons, this plan amendment does not allocate or designate minimum, maximum, or specific treatment acres. However, to display relative differences in alternatives and their effects, an estimated treatment level over a 10-year period is quantified. This treatment level is not intended as a target or a not-to-exceed value, and actual on-the-ground treatments may meet, exceed, or fall short of this level based on priorities, opportunities, and funding.

2.4.2 MANAGEMENT COMMON TO ALL ALTERNATIVES

The following elements are common to all five alternatives, including the No Action Alternative, which represents the current situation and reflects what is being implemented in an effort to meet current policy.

2.4.2.1 Management Restrictions

Wildland fire suppression restrictions and restoration/fuels reduction treatment restrictions would be implemented under all alternatives and would be specified in each of the 12 LUP amendments. These restrictions would be applied to suppression activities and vegetation treatment actions with the intent of protecting sensitive resources. All restrictions are intended to prevent significant impacts to natural and human resources and to meet current BLM state or federal policy. This section lists the resource disciplines for which restrictions were developed. Appendix Q describes in detail the management actions to be applied. In the appendix, restrictions are organized according to the resource discipline they affect. Because it is assumed that these restrictions would be applied, they were considered in the analysis of all alternatives.

2.4.2.1.1 Wildland Fire Suppression Restrictions

Suppression restrictions were developed for the following resource disciplines:

- Fire Management
- Cultural Resources and Historic Trails
- Noxious Weeds
- Human life, human communities, infrastructure, and property
- Recreation
- Riparian Areas
- Special Designations (wilderness study areas [WSAs], Areas of Critical Environmental Concern [ACECs])
- Vegetation

2.4.2.1.2 Fire and Non-Fire Vegetation Treatment Restrictions

Fire and non-fire vegetation treatment restrictions would be applied to site-specific restoration and hazardous fuels reduction treatment actions for the following resource disciplines:

- Vegetation
- Air Quality
- Cultural Resources and Historic Trails
- Hazardous Materials and Abandoned Mine Sites
- Livestock Grazing
- Placeholder Species
- Riparian Areas
- Special Management Areas
- Visual Resources
- Wildlife

2.4.2.1.3 Emergency Stabilization and Rehabilitation (ESR) Restrictions

The Field Office Normal Fire Rehabilitation Plans contain ESR restrictions that would be applied to all site-specific ESR actions.

2.4.2.2 Community Assistance/Protection Guidelines

The following community assistance actions would occur consistent with National Fire Plan (NFP) (USDI 2000) policy and would apply to all alternatives, including the No Action Alternative:

- Continue to collaborate with local partners to assess and define Wildland Urban Interface (WUI) areas, update existing mitigation plans, and implement a prevention and education program.
- Work with other federal agencies, state, county, and private entities to update County Mitigation Plans.
- Provide Rural Fire Assistance (RFA), as identified in Mitigation Plans, to rural fire districts. Assess and increase suppression capabilities and effectiveness by providing RFA to local fire suppression organizations.
- Provide planning and implementation assistance to private landowners so hazardous fuels can be reduced as identified in Mitigation Plans.
- Provide funding to implement fire education projects identified in Mitigation Plans.
- To reduce fuel hazards and the threat of wildland fire, including consideration of any local communities-at-risk.

- Continue to collaborate with local partners to assess WUI areas and update existing mitigation plans to implement fuels treatments.

2.4.3 ALTERNATIVE A - THE NO ACTION ALTERNATIVE (CURRENT PLAN DIRECTION)

Alternative A would be consistent with the direction, regulation, and policy of the 12 current LUPs. Non-fire related guidance would continue to be carried forward under the current 12 LUPs until they are revised.

The No Action Alternative (Alternative A) management direction described herein is a summary of management direction from the 12 existing LUPs to be amended by this planning process. The summarized management direction from existing plans is described using present-day terminology. The No Action Alternative management direction was developed this way for analysis and to facilitate comparison of alternatives. Appendix B identifies the specific fire management direction in each existing LUP that would continue under Alternative A.

This alternative emphasizes wildland fire suppression and does not allow for WFU. Therefore, consistent with current management, this alternative focuses on reactive stabilization and rehabilitation treatments following wildland fire (approximately 52 percent of footprint-acres in this alternative), as opposed to proactive restoration treatments (approximately 48 percent of footprint-acres in this alternative). Treatment levels were projected for the next 10 years based on the average annual treatments that have occurred over the past 10 years.

Vegetation treatments would continue to be conducted on a small scale and would emphasize benefits to specific resources (e.g., livestock forage or wildlife habitat). Though the current LUPs address the need for vegetation treatments, they generally lack specific guidance for WFU, restoration actions, hazardous fuels reduction, and WUI protection. The activities detailed in current LUPs are being undertaken in response to new regulations, policy, and national direction. These types of activities are compatible with other existing LUP program goals/objectives, and the existing LUPs do not preclude these activities.

No areas are designated as suitable for WFU in this alternative (Figure 2-1). Some of the existing LUPs do, however, allow the use of limited fire suppression. Current LUPs that identify limited suppression areas are the Cassia, Monument, Medicine Lodge, and Pocatello resource management plans (RMPs) and the Twin Falls, Big Desert, and Little Lost Birch Creek management framework plans (MFPs). (For more specific information, refer to the appropriate plan). Current high priorities are rehabilitation and restoration.

2.4.3.1 Alternative A - Assumptions

Over a 10-year period, up to approximately 250,200 footprint-acres would be treated under this alternative, assuming past treatment levels continue at the same rate in the future.

2.4.3.2 Alternative A - Goals/Objectives and Management Actions

Goal/Objective 1 - Emphasize protection from and rehabilitation after wildland fire within the WUI.

Management Actions

- Use suppression to safely manage and suppress wildland fires.
- Use mechanical, chemical, and seeding treatments for rehabilitation following wildland fire.
- In cooperation with state, county, and local governments and fire departments, develop mitigation plans and implement plan actions, including fuels reduction projects, rural fire department assistance, and public education.

Goal/Objective 2 - Reduce fine fuels and undesirable non-native plants and create perennial cover types so that wildland fires occur less frequently and at a smaller scale.

Management Actions

- Suppress all wildland fires in Low-elevation Shrub to protect areas where sagebrush dominates to minimize fire size.
- Following wildland fire, use chemical, mechanical, and seeding treatments with appropriate plant materials to attempt to stabilize sites and prevent dominance of invasive annual vegetation and noxious weeds. Plant materials would be native where appropriate and practical.
- Use RxFire to prepare areas for subsequent chemical, mechanical, and/or seeding treatments.

Goal/Objective 3 - Conduct fire and non-fire vegetation treatments in Mid-elevation Shrub, Juniper, Dry Conifer, Aspen/Conifer, and Mountain Shrub.

Management Actions

- Use mechanical, chemical, seeding, or RxFire treatments to meet resource management objectives.
- Remove encroaching or mature juniper using chemical, mechanical, and RxFire treatments to re-establish, maintain, or enhance Mid-elevation Shrub cover types.

2.4.3.3 Alternative A - Prioritization Criteria

Suppression priorities when multiple wildland fire ignitions occur include:

- Protect human life (the single, overriding priority).
- Protect human communities, community infrastructure, other property, and improvements.
- Protect cultural and natural resources based on the values to be protected, human health and safety, and costs of protection. *Once people are assigned, these human resources become the highest value to be protected.*

Other priorities would support BLM wildland fire policy and the existing LUPs and would be reflected in all Wildland Fire Situation Analyses (WFSAs). Overarching priorities for the planning area include:

- Protect WUI, including municipal watersheds.
- Protect stronghold, isolated, and key sage-grouse habitat.
- Protect cultural and natural resources, including special status species (SSS) habitat.
- Minimize the cost of wildland fire suppression.

Priorities for establishing fire and non-fire vegetation treatments include:

- Use RxFire and non-fire fuels treatments to improve or enhance Fire Regime Condition Class (FRCC) 2 and FRCC 3 acres where public/firefighter safety or WUI are at risk. A full description of FRCC is given in Section 3.2, Vegetation Resources and Fire's Natural Role (Issue 1).
- Use RxFire and non-fire fuels treatments to maintain FRCC 1 acres where hazardous fuels pose a risk to public or firefighter safety.
- Use RxFire and non-fire fuels treatments to improve or enhance FRCC 2 or FRCC 3 acres where sage-grouse habitat is at risk.
- Use RxFire and non-fire fuels treatments to improve or enhance FRCC 2 or FRCC 3 acres where wildlife areas of concern are at risk.
- Use RxFire and non-fire fuels treatments to improve or enhance FRCC 2 or FRCC 3 acres where other resources are at risk.

Fire management plans (FMPs) would re-visit both suppression and vegetation treatment priorities for resources when updated.

2.4.3.4 Alternative A - Wildland Fire Use (WFU) Areas

No acres in the planning area are identified as suitable for WFU for resource benefit.

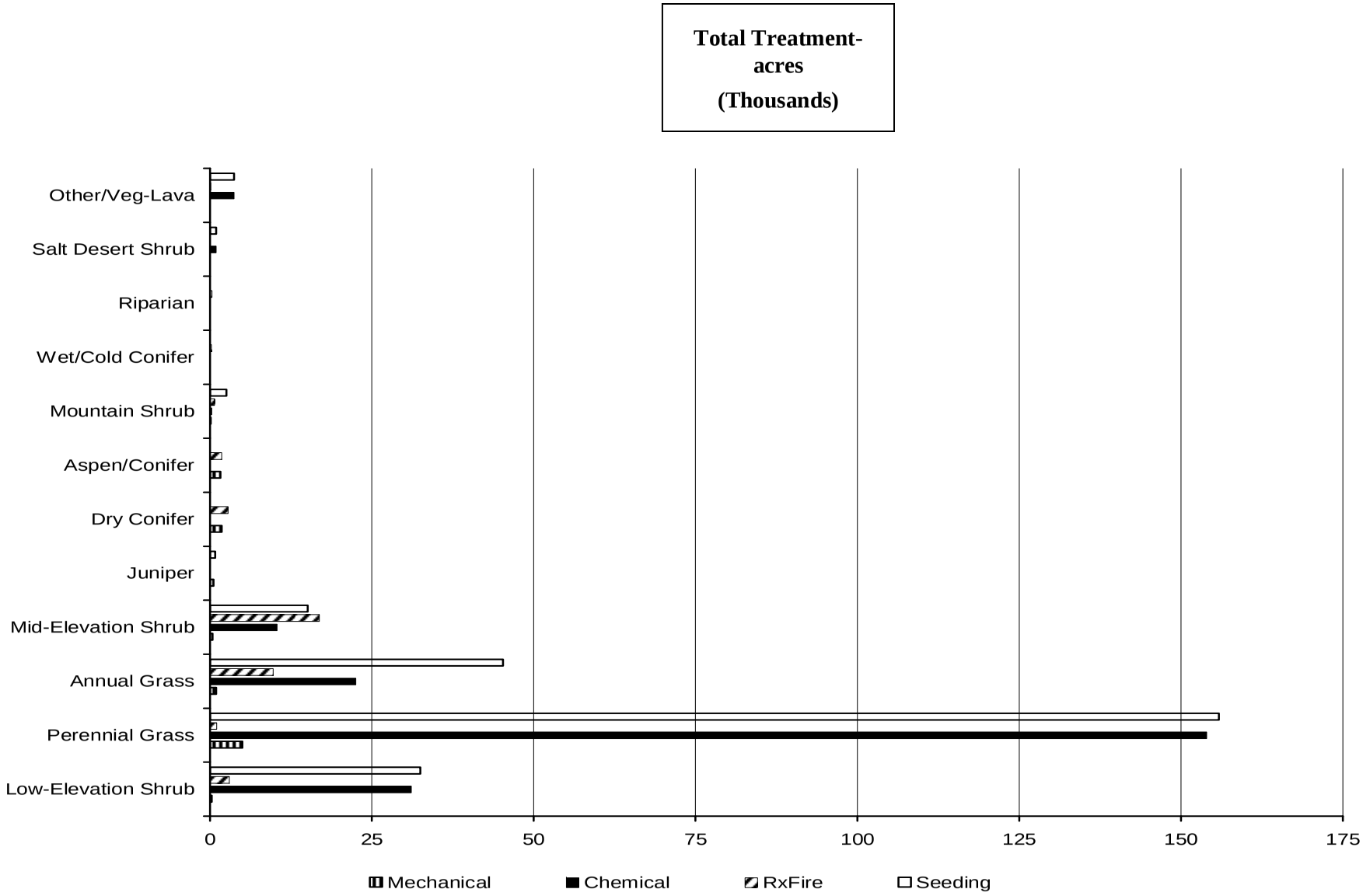
2.4.3.5 Alternative A - Treatment Levels

To implement Alternative A, approximately 250,200 footprint-acres would be treated over a 10-year period. Table 2-1 summarizes the total number of acres proposed in Alternative A by treatment type. Table 2-2 identifies the vegetation type/acres and footprint-acres and graphically illustrates the broad treatment levels (treatment-acres) for the various treatment methods (i.e., mechanical and chemical treatment, RxFire, and seeding). The locations of areas that are suitable/not suitable for WFU are shown in Figure 2-1.

TABLE 2-1. PLANNING AREA TOTAL FOOTPRINT AND TREATMENT ACRES BY TREATMENT TYPE, ALTERNATIVE A

Footprint Acres	Wildland Fire Use	Mechanical	Chemical	RxFire	Seeding
250,200	0	10,700	223,000	36,600	256,800

TABLE 2-2. ALTERNATIVE A - VEGETATION TYPE AND 10-YEAR TOTAL TREATMENT ACRES BY TREATMENT TYPE



2.4.3.6 Alternative A - Management Restrictions

Alternative A would have identical management restrictions to those common to all alternatives previously described in Section 2.4.2.1, Management Restrictions, and detailed in Appendix Q with the exception of fire suppression restrictions for threatened, endangered, and candidate species. Given Alternative A, fire management restrictions taken from a concurrence letter received from the USFWS on June 20, 2006 would not apply (Appendix O, Final Biological Assessment and USFWS Concurrence Letter). Planning area wide, the resource advisor would ensure emergency consultation is initiated with the USFWS whenever suppression activities impact T&E habitats.

2.4.4 MANAGEMENT ACTIONS COMMON TO ALL ACTION ALTERNATIVES

The following elements are common to all four action alternatives and include goals, DFC, prioritization criteria, and management restrictions that do not apply to the No Action Alternative. Goals and objectives are as follows:

- Protect and enhance sage grouse stronghold habitats.
- Protect and enhance key ecological components in plant and animal communities.
- Considered mechanical and/or chemical treatments first where fire is not an appropriate tool due to risk to life, property, or resource impacts.
- Move all vegetation types toward DFC.

2.4.5 DESIRED FUTURE CONDITION (DFC)

DFC is considered a management objective. For the purposes of this analysis, it indicates the proportional distribution of vegetation age classes/successional stages across the landscape. Each vegetation age class represents different vegetation species composition. Attaining a DFC within a vegetation type promotes a healthier and more diverse vegetation structure and composition, and returns the currently altered fire regimes to a fire regime that more closely parallels the historical fire regime.

In this analysis, DFC was determined by considering historical fire frequency, vegetation response time following disturbance, and the current condition of the vegetation. Uncharacteristic vegetation (e.g., cheatgrass [*Bromus tectorum*], invasive species, noxious weeds), which compose portions of the DFC (Table 2-3), would be treated but is expected to remain a part of vegetation cover types.

Because the attributes used to determine DFC were modeled and estimated using scientific literature and local expertise, the age class distribution for a given DFC should not be viewed as a target. The DFC age class percentage, when compared to the current age class percentage, indicates a desired trend. For example, if it is identified that approximately 20 percent of a vegetation type is dominated by shrub/grass (>30 years old), and the DFC indicates 50 percent, the desired trend is to create more shrub/grass (>30 years old) over time with the proposed management actions. The primary objective of the action alternatives is to meet the management goals. Specific DFC percentages were developed so the action alternatives could be compared

quantitatively and in a relative manner. Assumptions and calculations made to determine DFC are discussed in Appendix C.

DFC varies among vegetation types and is an objective of Alternatives B, C, D, and E. Management goals and DFC for the vegetation cover types in the planning area are presented in Table 2-3.

TABLE 2-3. PROPOSED MANAGEMENT GOALS AND DESIRED FUTURE CONDITION (DFC) FOR VEGETATION COVER TYPES IN THE UPPER SNAKE, POCATELLO, BURLEY, AND SHOSHONE FIELD OFFICES

Management Goals	DFC	
	Vegetation/Fuels Age Classes	Percent in DFC
Low-elevation Shrub, Perennial Grass, and Invasive Annual Grass		
Increase the number of acres with a native/placeholder shrub-grass mix. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape.	Perennial Grass: <15 years old Grass/shrub mix: 15-30 years old Shrub/grass mix: >30 years old	14% 14% 52%
Decrease the number of acres with more than 10% cheatgrass cover and/or weeds.	Cheatgrass/weeds	<20%
Mid-elevation Shrub (Including Juniper Encroachment Acres)		
Increase the number of acres with a native/placeholder shrub-grass mix. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape.	Perennial Grass: <5 years old Grass/shrub mix: 5-15 years old Shrub/grass mix: >15 years old	23% 45% 23%
Decrease the acres of Mid-elevation Shrub encroached upon by juniper, and/or any other undesirable species present.	Juniper encroachment Cheatgrass/weeds	7% 2%
Increase acres burned to more closely approximate the historical fire regime. Improve composition and structure of Mid-elevation Shrub types to better represent historical sagebrush steppe cover types.		
Mountain Shrub		
Increase the acres of early-seral and mid-seral stages. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape.	Perennial grass/shrub: <10 years old Shrub/Perennial Grass: 10-20 years old Shrub dominated: >20 years old	33% 33% 33%
Increase acres burned to more closely approximate the historical fire regime. Improve composition and structure of Mountain Shrub types to better represent historical Mountain Shrub cover types.		

TABLE 2-3. PROPOSED MANAGEMENT GOALS AND DESIRED FUTURE CONDITION (DFC) FOR VEGETATION COVER TYPES IN THE UPPER SNAKE, POCATELLO, BURLEY, AND SHOSHONE FIELD OFFICES

Management Goals	DFC	
	Vegetation/Fuels Age Classes	Percent in DFC
Aspen/Conifer and Dry Conifer		
Increase acres of early-seral and mid-seral Aspen/Conifer and Dry Conifer cover types (pure aspen and Aspen/Conifer mix). Spatial arrangement of varying age-classes should occur in a mosaic across the landscape.	Aspen: <30 years old Aspen/Conifer mix: 30-50 years Dry Conifer: >50 years old	40% 40% 20%
Increase acres burned to more closely approximate the historical fire regime. Improve composition and structure of Aspen/Conifer and Dry Conifer types to better represent historical Aspen/Conifer and Dry Conifer cover types.		
Salt Desert Shrub		
Maintain or increase acres with a native/placeholder shrub-grass mix. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape.	Perennial Grass: <30 years old Shrub/Grass/Bare Ground Mix: >30 years old	20% 76%
Decrease acres with cheatgrass, weeds, and/or other undesirable species present.	Cheatgrass/weeds	4%
Maintain fire frequency and size to approximate the historical fire regime. Maintain or improve Salt Desert Shrub types to better represent those historical cover types.		
Vegetated Rock/Lava		
Maintain or increase acres with a native/placeholder shrub-grass mix. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape.	Perennial Grass Rock/Shrub/Grass/Tree mix	6% 80%
Decrease acres with cheatgrass, weeds, and/or other undesirable species present.	Cheatgrass/weeds	<14%
Maintain fire frequency and size to approximate the historical fire regime. Maintain Vegetated Rock/Lava types to better represent those historical cover types.		
Wet/Cold Conifer		
Maintain the mix of early, mid, and late seral stands of lodgepole pine forest.	Shrub/grass: <30 years old Shrub/tree: 30-75 years old Tree-dominated: >75 years old	30% 44% 26%
Maintain fire frequency and size to approximate the historical fire regime. Maintain or improve Wet/Cold Conifer types to better represent those historical cover types.		

TABLE 2-3. PROPOSED MANAGEMENT GOALS AND DESIRED FUTURE CONDITION (DFC) FOR VEGETATION COVER TYPES IN THE UPPER SNAKE, POCATELLO, BURLEY, AND SHOSHONE FIELD OFFICES

Management Goals	DFC	
	Vegetation/Fuels Age Classes	Percent in DFC
WUI		
Decrease fire frequency and size in the vicinity of the WUI to protect public and fire-fighter safety, public resources, and private lands.	Decrease fire hazard from high to moderate or low by implementing vegetation treatments and actions outlined in County/Community Mitigation Plans.	

2.4.5.1 Prioritization Criteria

Following are the top two priorities under all four action alternatives:

1. Fire-fighter and public safety are the first priority in response to fire suppression. At no time would the activities described in this EIS compromise fire-fighter and public safety.
2. The protection of property and WUI is the second top priority.

WUI areas are identified in the National Fire Plan as requiring protection and are common to all alternatives. Communities-at-risk in the WUI were identified in the Federal Register (66FR751 8/17/2001) and are assessed via County/Community Mitigation plans and initiated by interagency planning efforts. The National Fire Plan mandates that priority be given to protecting these communities from wildland fire and to preventing fires that start on private lands from spreading to BLM-administered lands. Vegetation treatments in and around WUI areas would be conducted with the goal of reducing fire hazard. This goal would not necessarily contribute to progress towards FRCC 1.

Vegetation treatment priorities in non-WUI areas would vary by field office as vegetation types vary across the planning area. In general, vegetation treatment priorities include the following:

- Diversify Perennial Grass to speed reestablishment of sagebrush cover.
- Enhance structural and species diversity in degraded Low-elevation sagebrush steppe.
- Reduce shrub and juniper density in Mid-elevation Shrub.
- Reduce invasive species or noxious weeds in all vegetation types.
- Rejuvenate aspen stands, reduce insect infestation and disease, and create a diversity of forest successional stages across the landscape.
- In Mountain Shrub, rejuvenate old, decadent shrubs and increase cover and density of desirable herbaceous species.

2.4.5.2 Management Restrictions

Wildland fire suppression restrictions and restoration/fuels reduction treatment restrictions would be implemented under all four action alternatives and would be specified in each of the 12 LUP

amendments. These restrictions would be applied to suppression activities and vegetation treatments with the intent of protecting sensitive resources. They include those listed in a concurrence letter received from the USFWS on June 20, 2006 (Appendix O, Final Biological Assessment and USFWS Concurrence Letter) to protect threatened, endangered, and candidate species. However, as wildland fire suppression is generally considered an emergency action, the agency administrator could choose to override the restrictions to protect life, property, or valuable resources. All restrictions are intended to prevent significant impacts to natural and human resources and to meet current BLM state or federal policy. This section lists the resource disciplines for which restrictions were developed. Appendix Q describes in detail the management actions to be applied. In the appendix, restrictions are organized according to the resource discipline they address. Because it is assumed that these restrictions would be applied, they were considered in the analysis of all action alternatives

2.4.5.2.1 Wildland Fire Suppression Restrictions

Suppression restrictions were developed for the following resource disciplines:

- Fire Management
- Cultural Resources and Historic Trails
- Hazardous Materials
- Noxious Weeds
- Recreation
- Riparian Areas
- Special Designations (WSAs, ACECs)
- Threatened, Endangered, and Candidate Species
- Vegetation

2.4.5.2.2 Fire and Non-Fire Vegetation Treatment Restrictions

The fire and non-fire vegetation treatment restrictions would be applied to site-specific restoration and hazardous fuels reduction treatment actions for the following resource disciplines:

- Vegetation
- Air Quality
- Cultural Resources and Historic Trails
- Hazardous Materials and Abandoned Mine Sites
- Livestock Grazing
- Placeholder Species
- Riparian Areas
- Special Management Areas
- Threatened, Endangered, and Candidate Species
- Visual Resources
- Wildlife

2.4.5.2.3 Emergency Stabilization and Rehabilitation (ESR) Restrictions

The Field Office Normal Fire Rehabilitation Plans contains ESR restrictions that would be applied to all site-specific ESR actions.

2.4.6 ALTERNATIVE B

Alternative B would incorporate new policy, guidance, and changes brought about by the National Fire Plan (USDI 2000), which has been developed since the existing LUPs were approved. This alternative emphasizes the increased use of fire, including RxFire and WFU, to more closely approximate historical fire regimes and to prepare sites for restoration treatments.

Post-wildland fire treatments would be used to stabilize and rehabilitate areas in Low-elevation Shrub, with a focus on treating Invasive Annual Grass and Mid-elevation Shrub cover types, where juniper encroachment is a problem. Restoration treatments would be used primarily in Low-elevation Shrub (including Invasive Annual Grass), Aspen/Conifer, Dry Conifer, Mountain Shrub, and Mid-elevation Shrub encroached by juniper. Treatment levels would be limited by existing operational capabilities and resources.

Alternative B considers about 3.3 million acres suitable for WFU (see Figure 2-1). Within the 3.3 million acres, 112,000 acres are the estimated maximum number of WFU acres that would be implemented over a 10-year period, given lightning fire frequency within the vegetation types where WFU is proposed. WFU areas were designated by field office personnel where it was determined that WFU could benefit resources and help attain management goals. In general, WFU would not be used where there are SSS or critical wildlife habitats, past rehabilitation treatments, small tracts of BLM-administered land, or public health and safety concerns.

2.4.6.1 Alternative B - Assumptions

Over a 10-year period under this alternative, up to approximately 646,000 footprint-acres would be treated (approximately three times the acreage in Alternative A).

Full suppression is the appropriate management response where life and property are at risk or in Low-elevation Shrub. The full spectrum of management responses would be allowed in other vegetation cover types. Restoration would be emphasized (approximately 80 percent of footprint-acres) while conducting rehabilitation (approximately 20 percent of footprint-acres), as needed.

2.4.6.2 Alternative B - Goals/Objectives and Management Actions

Goal/Objective 1 - Make progress toward DFC in Low-elevation Shrub, Perennial Grass, and Invasive Annual Grass cover types, where wildland fire should occur less frequently and at a smaller scale.

Management Actions

- Use the appropriate management response to safely manage wildland fire and reduce the number of acres burned to a level similar to the historical regime. The appropriate management response in Low-elevation Shrub is suppression of all wildland fire starts to protect existing and restored sagebrush cover types.
- Conduct fuels and restoration projects in areas invaded by or at risk of being invaded by annual, non-native vegetation, and noxious weeds.
- Following WFU and RxFire treatments, use chemical, mechanical, and seeding treatments with appropriate plant materials to attempt to stabilize sites and prevent

dominance of invasive, annual vegetation, and noxious weeds. Use native plant materials where appropriate and practical.

- Allow WFU and RxFire in areas dominated by annual species following site-specific NEPA analysis.

Goal/Objective 2 - Make progress toward DFC in the Mid-elevation Shrub, Juniper, Dry Conifer, Aspen/Conifer, and Mountain Shrub vegetation types, where wildland fire should be occurring more frequently on the landscape.

Management Actions

- Use the appropriate management response to safely manage wildland fires.
- Allow fire use following site-specific NEPA analyses.
- Design vegetation treatments to mimic the effect of historical fire on vegetation structure and composition.
- In Mid-elevation Shrub, conduct RxFire and chemical, mechanical, and seeding treatments in all areas invaded by or at risk of being invaded by annual, non-native vegetation, and noxious weeds.
- Maintain or restore Mid-elevation Shrub cover types, using chemical, mechanical, and RxFire treatments to remove encroaching or mature juniper.
- Following wildland fire, WFU and RxFire treatments, use chemical, mechanical, and seeding treatments with appropriate plant materials to attempt to stabilize sites and prevent dominance of invasive, annual vegetation, and noxious weeds. Use native plant materials where determined to be appropriate and practical at the project-implementation level.

Goal/Objective 3 - Maintain or make progress toward DFC in the Wet/Cold Conifer and Salt Desert Shrub cover types and in vegetation types where fire frequencies are within the historical range of variability.

Management Actions

- Use the appropriate management response to safely manage and suppress wildland fires.
- Allow WFU in Vegetated Rock/Lava. Current policy and appropriate NEPA requirements would be followed prior to implementation.
- Generally limit projects in Salt Desert Shrub, Vegetated Rock/Lava, and Wet/Cold Conifer cover types to chemical treatments to control noxious weeds and invasive species.

2.4.6.3 Alternative B - Prioritization Criteria

When multiple wildland fire ignitions occur, the criteria for establishing suppression priorities would follow the two prioritization criteria described under Section 2.4.4.1, followed by the following prioritization:

- Minimize risks to sagebrush steppe.
- Minimize risks to Dry Conifer.

Criteria for establishing vegetation treatments are:

- Protect/maintain sagebrush steppe. Prioritize treatment to areas that are adjacent to existing sagebrush cover types.
- Restore sagebrush steppe.
- Restore Aspen/Conifer, Mountain Shrub, Dry Conifer.
- Protect areas of key ecosystem components that are at high risk of loss.

2.4.6.4 Alternative B - Wildland Fire Use (WFU) Areas

Approximately 2.9 million acres across the planning area would be identified as suitable for WFU for resource benefit, and approximately 2.1 million acres would be identified as not suitable/appropriate for WFU due to ecological, social, economic, political, or resource constraints. The locations of areas that are suitable/not suitable for WFU are shown in Figure 2-1. Appendix D identifies the specific suitable/not suitable acres by field office.

2.4.6.5 Alternative B - Treatment Levels

To implement Alternative B, 646,000 footprint-acres would be treated over a 10-year period. Table 2-4 summarizes treatment acres by treatment type for Alternative B. Table 2-5 identifies the vegetation type/acres and footprint-acres and graphically illustrates the broad treatment levels (treatment-acres) for the various treatment methods (i.e., WFU, mechanical and chemical treatment, RxFire, and seeding).

TABLE 2-4. PLANNING AREA TOTAL FOOTPRINT AND TREATMENT ACRES BY TREATMENT TYPE, ALTERNATIVE B

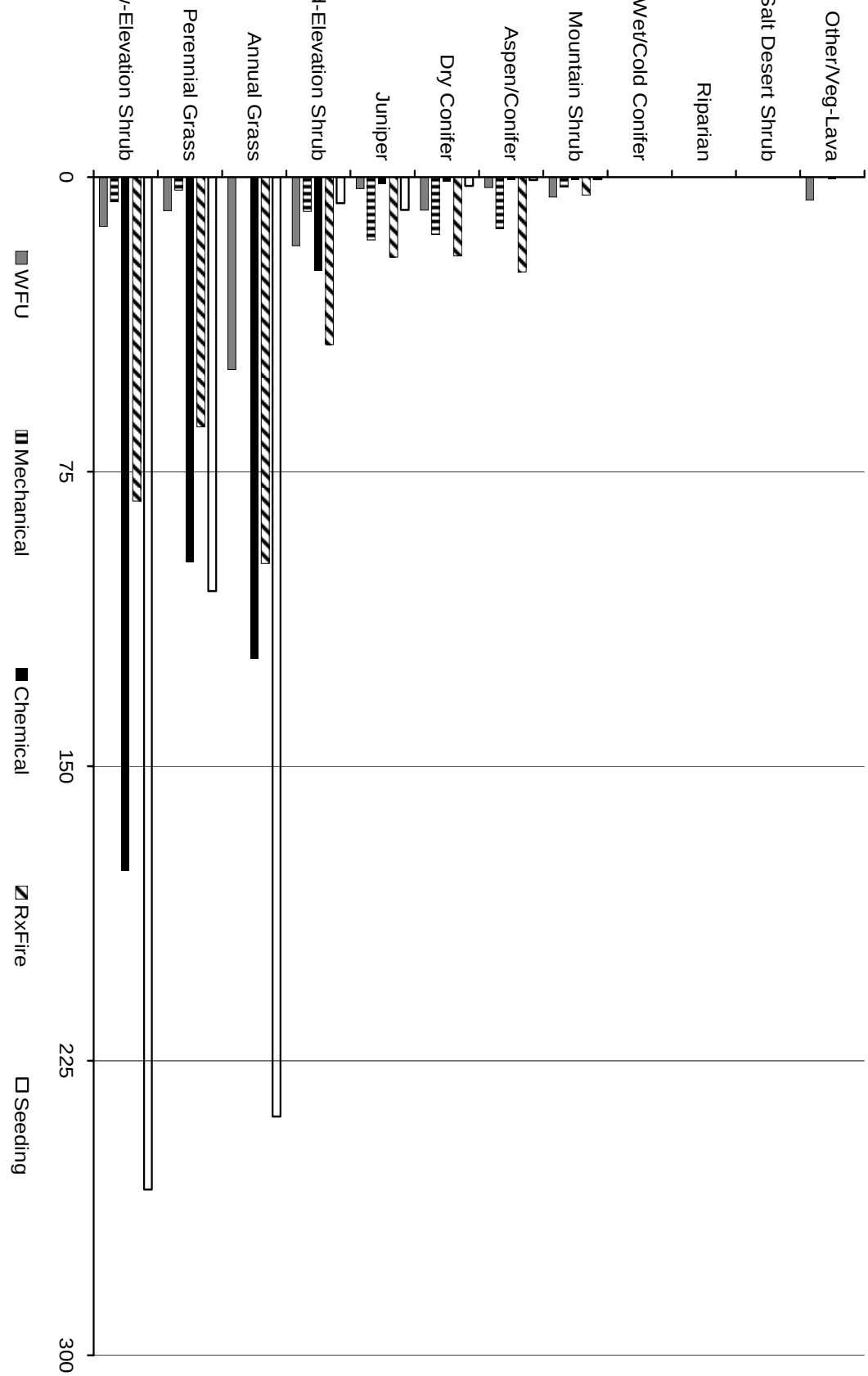
Footprint Acres	Wildland Fire Use	Mechanical	Chemical	RxFire	Seeding
646,000	112,200	64,300	426,100	356,000	620,900

Alternative B treatment levels were determined by field office staff considering the intent of this alternative, which is to increase the use of fire, including RxFire and WFU, to more closely approximate historical fire regimes and to prepare sites for restoration treatments.

2.4.6.6 Alternative B - Management Restrictions

Alternative B would have identical management restrictions to those common to all alternatives previously described in Section 2.4.2.1, Management Restrictions, and detailed in Appendix Q.

TABLE 2-5. ALTERNATIVE B – VEGETATION TYPE AND 10-YEAR TOTAL TREATMENT ACRES BY TREATMENT TYPE



2.4.7 ALTERNATIVE C

This alternative was designed to address Issue 1 (found in Section 1.4.1, Issues Driving Development of Alternatives):

> *What fire and non-fire vegetation treatment levels for the Upper Snake River Plain ecosystem would best meet the goals of the Cohesive Strategy?*

The goals of the Cohesive Strategy and 10-year Comprehensive Strategy include:

- Improve fire prevention and suppression.
- Reduce hazardous fuels.
- Restore fire-adapted ecosystems.
- Promote community assistance.

Treatment levels, treatment locations, and priorities were developed with these goals in mind. The emphasis of Alternative C is to replicate historical disturbance and succession patterns for the vegetation types in the planning area using fire, mechanical and chemical treatments, and adopting the goals and priorities set in the Cohesive Strategy.

Alternative C considers about 1.7 million acres suitable for WFU (see Figure 2-2). Within the 1.7 million acres, 130,000 acres are the estimated maximum number of WFU acres that would be implemented over a 10-year period given lightning fire frequency in the vegetation types where WFU is proposed. In this alternative, WFU areas were determined considering the natural fire regime of each vegetation types, including average fire frequency and size. WFU would be emphasized in Aspen/Conifer, Dry Conifer, Juniper, Mid-elevation Shrub, Mountain Shrub, Vegetated Rock/Lava, and Wet/Cold Conifer vegetation cover types in which it was determined that WFU could benefit resources and help attain management goals.

This alternative also proposes to decrease the occurrence of wildland fire in the Low-elevation Shrub (including Perennial and Invasive Annual Grass) cover type using aggressive, proactive restoration, and post-fire rehabilitation of areas dominated by Invasive Annual Grasses. Approximately 91 percent of the footprint-acres of these vegetation types would be restored, and approximately 9 percent of their footprint-acres would be rehabilitated.

This alternative was developed using the following approach:

- Replicate historical disturbance patterns and successional patterns as closely as possible by applying vegetation treatments.
- Maintain treatment levels at the same rate as the historical fire rotation for each vegetation type (i.e., the acreage treated over 10 years corresponding to the burned acreage expected over 10 years under historical conditions).
- After 10 to 15 years of treatment, ensure that wildland fires burn less frequently and burn smaller acreages than they currently do in Low-elevation Shrub, Perennial Grass, and Invasive Annual Grass cover types. This shift would be due to:

- More proactive restoration in areas dominated by non-native annual species.
- More treatments following wildland fire in areas invaded by, or with the potential to be invaded by undesirable non-native annual species.
- Strategic placement of restoration treatments to protect Low-elevation Shrub cover types.

2.4.7.1 Alternative C - Assumptions

Over a 10-year period, under this alternative, up to approximately 1,687,000 footprint-acres would be treated (approximately seven times the acreage in Alternative A).

Alternative C differs from Alternative B in two major ways: (1) Alternative C would treat all cover types to a level that returns the fire regime to the range of historical variability, and (2) Alternative C would not be limited by existing operations capabilities and resources.

2.4.7.2 Alternative C - Goals/Objectives and Management Actions

Goal/Objective 1 - Make progress toward DFC in Low-elevation Shrub, Perennial Grass, and Invasive Annual Grass vegetation types so that wildland fire occurs less frequently and at a smaller scale on the landscape. Reduce by half the number of wildland fires in these vegetation types to create a wildland fire regime within the historical range of variability.

Management Actions

- Use RxFire to prepare areas for chemical, mechanical, and/or seeding treatments, or, if needed, to dispose of vegetation or accumulated litter.
- Strategically place treatments on a landscape scale to prevent fire from spreading toward or from WUI areas, Low-elevation Shrub cover type, or other resources at risk, using the entire array of mechanical, chemical, and small-scale RxFire operations to thin, reduce, and control hazardous fuels.

Goal/Objective 2 - Make progress toward DFC in the Mid-elevation Shrub, Juniper, Dry Conifer, Aspen/Conifer, and Mountain Shrub vegetation types by increasing WFU and RxFire to create a fire regime within the historical range of variability.

Management Actions

- Use mechanical and chemical treatments to prepare areas in FRCC 2 and FRCC 3 for RxFire and WFU.
- Where prescriptive parameters, resource conditions, and vegetation conditions allow, use WFU or RxFire to increase the annual average number of wildland fire acres to an average similar to historical conditions. Current policy and appropriate NEPA requirements would be followed before implementation.
- Following WFU and RxFire treatments, use chemical, mechanical, and seeding treatments with appropriate plant materials to attempt to stabilize sites and prevent dominance of invasive, annual vegetation, and noxious weeds. Use of native plant materials would be emphasized.

Goal/Objective 3 - In Wet/Cold Conifer, Riparian, Salt Desert Shrub, and Vegetated Rock/Lava vegetation types and/or areas in FRCC 1, maintain vegetation conditions using mechanical, chemical, RxFire, or WFU treatments, such that wildland fire regimes are within the historical range of variability (i.e., maintain the current fire regime in these vegetation types).

Management Action

- Use treatments, as appropriate, to maintain landscapes in FRCC 1.

2.4.7.3 Alternative C - Prioritization Criteria

When multiple wildland fire ignitions occur, the criteria for establishing suppression priorities would follow the two prioritization criteria described under Section 2.4.4.1, followed by the following prioritization:

- Minimize risks to Low-elevation Shrub vegetation type where frequent, uncharacteristic fires occur.
- Minimize risks to other vegetation types, where changes in fuel accumulation and fire occurrence have occurred (i.e., FRCC 2 and FRCC 3 areas).

Criteria for establishing vegetation treatments are:

- Design landscape-scale projects to reduce the *combined* risk to human life/property and resources (e.g., where WUI and ecosystems at risk coincide).
- Design projects through interagency planning performed at the landscape level in conjunction with active community participation and development of stakeholder partnerships in the planning and monitoring processes.

2.4.7.4 Alternative C - Wildland Fire Use (WFU) Areas

Alternative C would provide the most treatment options and would treat at a level necessary to return the planning area to FRCC 1 while addressing specific resource management concerns.

Approximately 1.7 million acres across the planning area would be identified as suitable for WFU for resource benefit, and approximately 3.3 million acres would be identified as not suitable/appropriate due to social, economic, political, or resource constraints. The locations of areas that are not suitable for WFU are shown in Figure 2-2. Appendix D identifies the specific suitable/not suitable acres by field office.

2.4.7.5 Alternative C - Treatment Levels

To implement Alternative C, 1,687,000 footprint-acres would be treated over a 10-year period. Table 2-6 summarizes treatment acres by treatment type for Alternative C. Table 2-7 illustrates the vegetation type/acres and footprint-acres and graphically illustrates the broad treatment levels (treatment-acres) for the various treatment methods (i.e., WFU, mechanical and chemical treatment, RxFire, and seeding).

TABLE 2-6. PLANNING AREA TOTAL FOOTPRINT AND TREATMENT ACRES BY TREATMENT TYPE, ALTERNATIVE C

Footprint Acres	Wildland Fire Use	Mechanical	Chemical	RxFire	Seeding
1,687,000	130,000	136,000	993,000	1,035,000	1,161,000

Alternative C treatment levels were determined by fire ecologists who used the natural fire rotation to determine appropriate disturbance levels by vegetation type. Treatment levels in Alternative C are intended to replicate historical disturbance patterns and succession patterns for the vegetation types in the planning area by using fire, mechanical and chemical treatments, and adopting the goals and priorities set in the Cohesive Strategy.

2.4.7.6 Alternative C - Management Restrictions

Alternative C would have identical management restrictions to those common to all alternatives previously described in Section 2.4.2.1, Management Restrictions, and detailed in Appendix Q.

2.4.8 ALTERNATIVE D

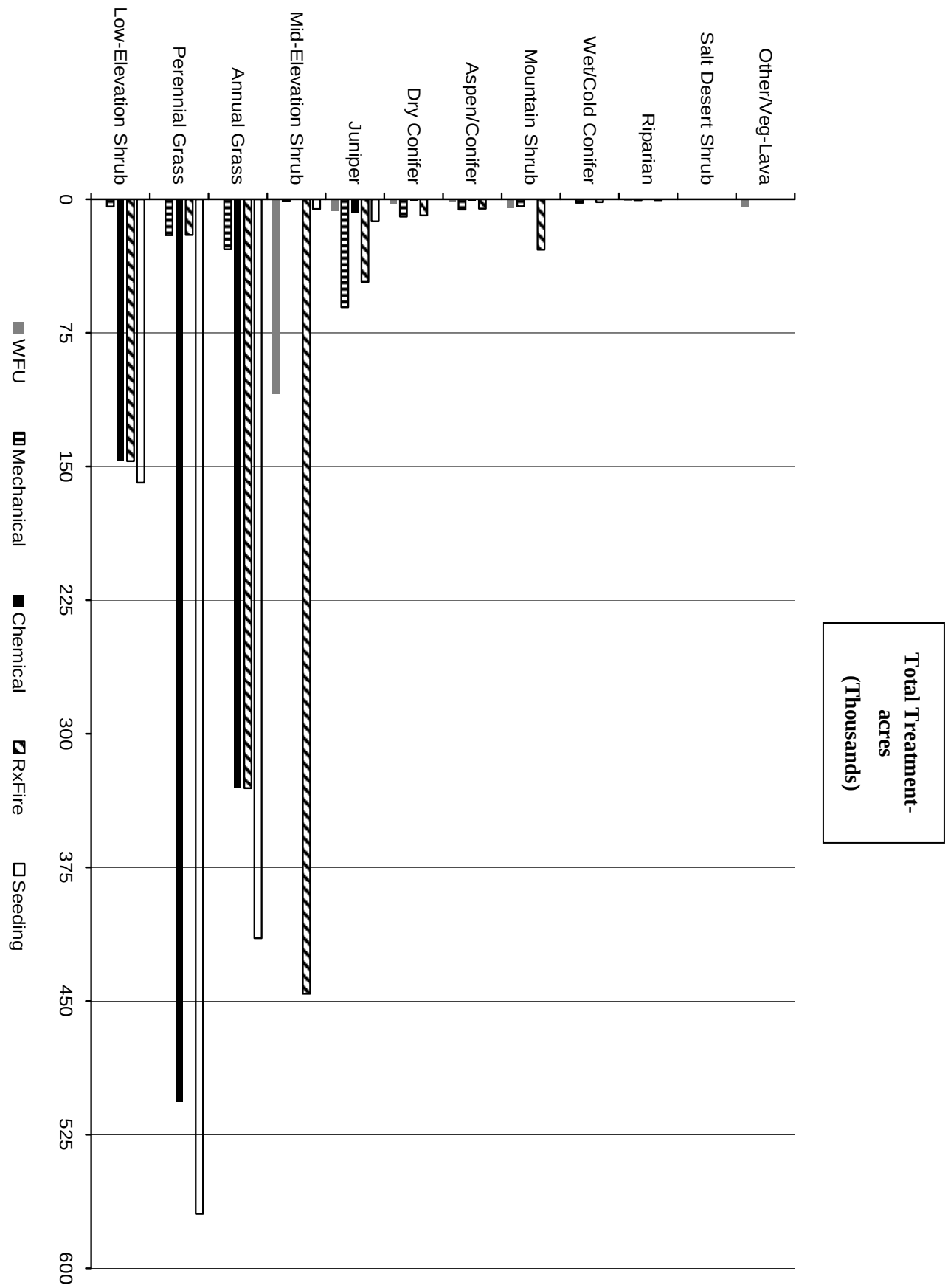
Alternative D was designed to address Issue 2 (found in Section 1.4.1, Issues Driving Development of Alternatives):

> *The types of treatments under the Proposed Action may negatively affect sage grouse habitat. What effect would different types or levels of treatment have on the sagebrush steppe ecosystem and sagebrush-obligate wildlife species?*

This alternative recognizes that the sagebrush steppe ecosystem and its associated wildlife species, including sage grouse, are at risk from increased wildland fire and other disturbances. This alternative emphasizes maintaining existing, high-quality sagebrush steppe habitat and increasing the quantity of sagebrush steppe via post-wildland fire rehabilitation and proactive restoration. Restoration would be emphasized (approximately 89 percent of footprint-acres), and rehabilitation would be conducted as needed (approximately 11 percent of footprint-acres).

Alternative D considers about 400,000 acres suitable for WFU (see Figure 2-2). Within the 400,000 acres, 14,800 acres are the estimated maximum number of WFU acres that would be implemented over a 10-year period given lightning fire frequency in the vegetation types where WFU is proposed. These areas were designated by field office personnel where it was determined that WFU would benefit resources and help attain management goals in Juniper and Mountain Shrub vegetation cover types. The acres mapped as suitable for WFU in Figure 2-2 do not include areas where WFU may be found to be suitable for improving sage grouse habitats. WFU may be allowed in sage grouse Restoration (R1-3), key, and source habitat for the benefit of the habitat (see Figure 3-3) only after site-specific project level coordination with IDFG (see Glossary for definitions of Restoration (R1-3), key, and source habitats).

TABLE 2-7. ALTERNATIVE C – VEGETATION TYPE AND 10-YEAR TOTAL TREATMENT ACRES BY TREATMENT TYPE



Vegetation treatments would focus on the Low-elevation and Mid-elevation Shrub, Invasive Annual Grass, Perennial Grass, and Mountain Shrub cover types, as well as sagebrush steppe invaded by juniper. Mechanical, chemical, and seeding treatments would be emphasized. RxFire would be used primarily to prepare areas for seeding and to create mosaics for the improvement or enhancement of sagebrush steppe habitats. Restoration priorities would be identified to enlarge and reconnect sagebrush steppe habitat.

This alternative was developed using the following approach:

- Make progress toward DFC, resulting in improved sage grouse source and key habitats.
- Manage fuels and fire across the sagebrush steppe landscape to provide habitat for a variety of sagebrush-obligate wildlife species as well as other resource benefits. Progress made toward DFC would result in improved habitat for sagebrush steppe obligate species.
- Because of the emphasis of this alternative, no treatments in Dry Conifer, Aspen/Conifer, Salt Desert Shrub, and Wet/Cold Conifer would be undertaken. However, the overriding priority to protect life and property in and around WUI areas would necessitate treatment of these types when life and property are threatened.

2.4.8.1 Alternative D - Assumptions

Over a 10-year period, under this alternative, up to approximately 1,522,000 footprint-acres would be treated (approximately six times the acreage in Alternative A). It is assumed that Alternative D would not be limited by existing operations capabilities and resources.

2.4.8.2 Alternative D - Goals/Objectives and Management Actions

Goal/Objective 1 - Make progress toward DFC in the Low-elevation Shrub, Perennial Grass, Invasive Annual Grass, Mid-elevation Shrub, Mountain Shrub, and Juniper vegetation types.

Management Actions

- Use chemical, mechanical, seeding, and RxFire treatments as appropriate to achieve DFC.
- In Perennial Grass, Invasive Annual Grass, and juniper-invaded cover types, restore the sagebrush steppe with an aggressive sagebrush seeding effort, using the appropriate sagebrush subspecies for the treatment area.

Goal/Objective 2 - Maintain, protect, and expand sage grouse source habitats.

Management Actions

- Suppress wildland fires in sage grouse source habitats (Figure 3-3), except where WFU would benefit habitat.
- Allow WFU in sage grouse source habitats for the benefit of the habitat only after site-specific project level coordination with IDFG (Figure 3-3).
- Conduct vegetation treatments in areas that pose a wildland fire risk to source habitats.

- Treat areas within source habitats that have low resiliency (i.e., areas characterized by low species diversity, undesirable composition, and dead or decadent sagebrush).
- Following wildland fire, WFU and RxFire treatments, use chemical, mechanical, and seeding treatments with appropriate plant materials to attempt to stabilize sites and prevent dominance of invasive, annual vegetation, and noxious weeds. Use native plant materials where determined to be appropriate and practical at the project-implementation level.

Goal/Objective 3 - Treat sage grouse key and restoration habitats to expand source habitats. Improve and maintain sage grouse Restoration (R1-3) and key habitats.

Management Actions

- Use the appropriate management response to wildland fire in all restoration and key habitats.
- Allow WFU in sage grouse restoration and key habitats for the benefit of the habitat only after site-specific project level coordination with IDFG (Figure 3-3).
- Conduct vegetation treatments in restoration and key habitats to reduce risk of wildland fire and reconnect restoration and key habitats.
- Treat areas of restoration and key habitats that have low resiliency characterized by low species diversity.

2.4.8.3 Alternative D - Prioritization Criteria

When multiple wildland fire ignitions occur, the criteria for establishing suppression priorities would follow the two prioritization criteria described under Section 2.4.4.1, followed by the following prioritization:

- Minimize risks to sage grouse source habitats.
- Minimize risks to sage grouse key habitats.
- Minimize risks to sage grouse restoration habitats.

Criteria for establishing vegetation treatments are:

- Within sage grouse source habitat, treat areas of low resilience.
- Within key and restoration habitat,
  - Treat areas adjacent to source habitat.
  - Enhance key habitat.
  - Treat areas that pose a fire risk to source and key habitats.
  - Treat areas adjacent to key habitat.

2.4.8.4 Alternative D - Wildland Fire Use (WFU) Areas

Approximately 430,000 acres across the planning area would be identified as suitable for WFU for resource benefit, and approximately 4.6 million acres would be identified as not appropriate due to social, economic, political, and resource constraints. The location of areas that are not

appropriate for WFU are shown in Figure 2-2. Appendix D identifies the specific WFU suitable/not appropriate acres by field office.

2.4.8.5 Alternative D - Treatment Levels

To implement Alternative D, 1,522,000 footprint-acres would be treated over a 10-year period. Table 2-8 summarizes treatment acres by treatment type for Alternative D. Table 2-9 identifies the vegetation type/acres and footprint-acres and graphically illustrates the broad treatment levels (treatment-acres) for the various treatment methods (i.e., WFU, mechanical and chemical treatment, RxFire, and seeding).

TABLE 2-8. PLANNING AREA TOTAL FOOTPRINT AND TREATMENT ACRES BY TREATMENT TYPE, ALTERNATIVE D

Footprint Acres	Wildland Fire Use	Mechanical	Chemical	RxFire	Seeding
1,522,000	14,800	1,320,000	1,503,000	677,000	1,486,400

Alternative D treatment levels were established by wildlife biologists who determined treatment levels needed to maintain existing, high-quality sagebrush steppe habitat and to increase the quantity of sagebrush steppe via post-wildland fire rehabilitation and proactive restoration.

2.4.8.6 Alternative D - Management Restrictions

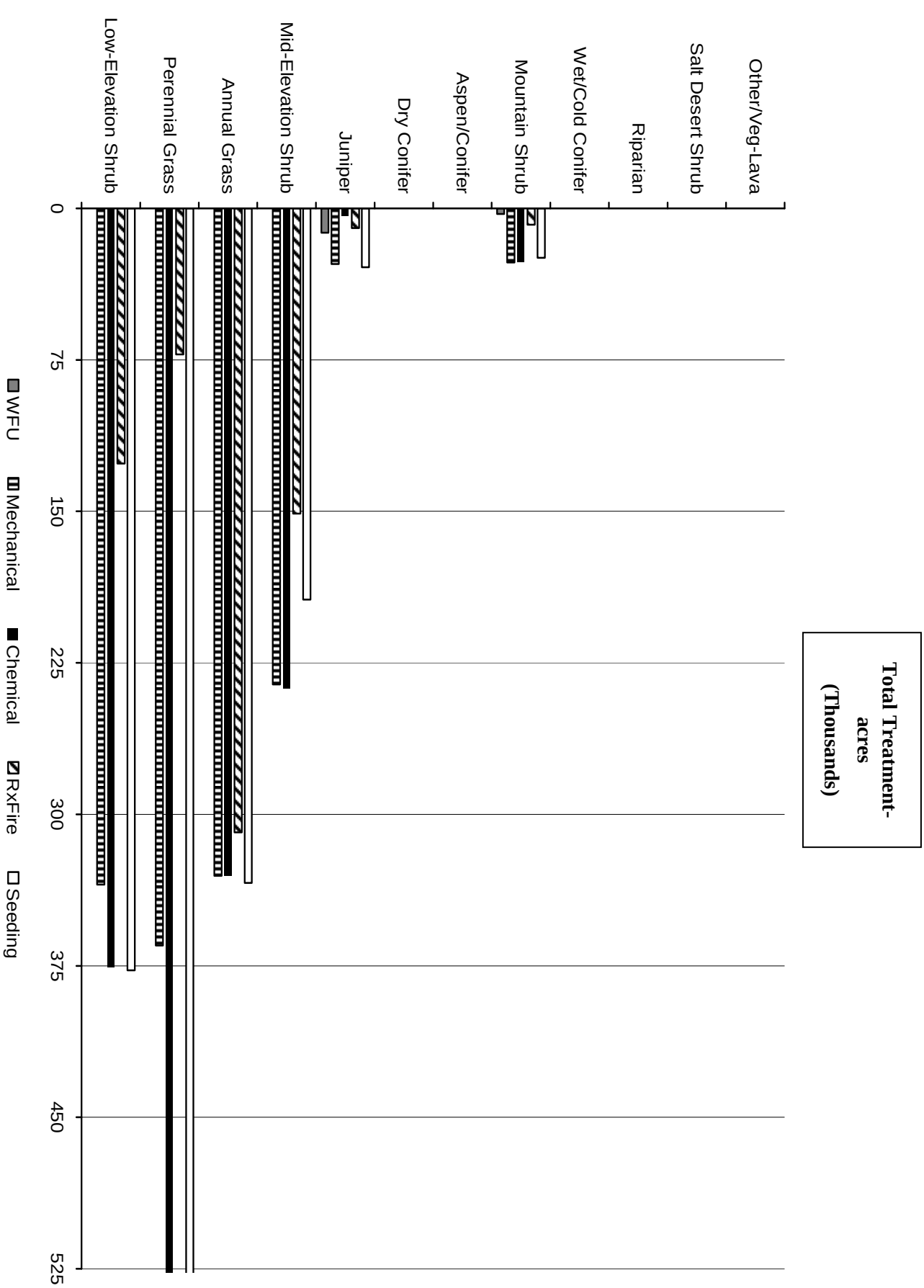
Alternative D would have identical management restrictions to those common to all alternatives previously described in Section 2.4.2.1, Management Restrictions, and detailed in Appendix Q.

2.4.9 ALTERNATIVE E (PROPOSED PLAN AMENDMENT)

This alternative was designed in response to comments received on the November 5, 2004 Fire Management Direction Amendment (FMDA) Draft Environmental Impact Statement (DEIS). This alternative addresses Issue 1 (Alternative C) for forested vegetation types and the entirety of Issue 2 (Alternative D). For a discussion of issues, see Section 1.4.1, Issues Driving Development of Alternatives. Alternative E recognizes that:

- The sagebrush steppe ecosystem and its associated wildlife species, including sage grouse, are at risk from increased wildland fire and other disturbances.
- Fuel accumulations in vegetation types with historically frequent fire regimes (i.e., Aspen/Conifer, Dry Conifer) are at risk of losing key ecological components due to fire suppression.
- Hazardous fuels exist in the WUI.

TABLE 2-9. ALTERNATIVE D – VEGETATION TYPE AND 10-YEAR TOTAL TREATMENT ACRES BY TREATMENT TYPE



Alternative E emphasizes conserving and restoring sagebrush steppe while replicating historical disturbance and succession patterns in vegetation types with historically frequent fire regimes by use of fire, mechanical and chemical treatments, and adopting the goals and priorities set in the Cohesive Strategy. Restoration would be emphasized (approximately 91 percent of footprint-acres), and rehabilitation would be conducted as needed (approximately 9 percent of footprint-acres).

This alternative addresses the Cohesive Strategy and the 10-year Comprehensive Strategy for forested vegetation cover types. The goals of the Cohesive Strategy and 10-year Comprehensive Strategy include:

- Improve fire prevention and suppression
- Reduce hazardous fuels
- Restore fire-adapted ecosystems
- Promote community assistance

Under Alternative E, wildland fire suppression efforts would emphasize protection of WUI and sagebrush steppe and forested habitats.

In general, WFU would not be used where there are SSS or critical wildlife habitats, past rehabilitation treatments, small tracts of BLM-administered lands, or public health and safety concerns. Alternative E would increase RxFire in Aspen/Conifer, Dry Conifer, Mountain Shrub, and Mid-elevation Shrub at risk of juniper encroachment, and decrease the occurrence of wildland fires in the Low-elevation and Mid-elevation Shrub, Perennial Grass, Invasive Annual Grass, and Mountain Shrub using aggressive, proactive restoration, and post-fire rehabilitation of areas dominated by Invasive Annual Grasses.

Alternative E considers about 1.7 million acres suitable for WFU (Figure 2-2). Within the 1.7 million acres, approximately 19,300 acres are the estimated number of WFU acres that would be implemented over a 10-year period given lightning fire frequency in the vegetation types where WFU is proposed. In this alternative, WFU areas were determined considering the natural fire regime of each vegetation types, including average fire frequency and size in Aspen/Conifer, Dry Conifer, Mid-elevation Shrub (including Juniper), Mountain Shrub, Vegetated Rock/Lava, and Wet/Cold Conifer vegetation cover types in which it was determined that WFU could benefit resources and help attain management goals. The acres mapped as suitable for WFU in Figure 2-2 do not include areas where WFU may be found to be suitable for improving sage grouse habitats. WFU may also be allowed in sage grouse Restoration (R1-3), key, and source habitat for the benefit of the habitat (Figure 3-3) only after site-specific project level coordination with IDFG (see Glossary for definitions of Restoration (R1-3), key, and source habitats).

This alternative also proposes to decrease the occurrence of wildland fire in the Low-elevation Shrub (including Perennial and Invasive Annual Grass) cover type using aggressive, proactive restoration, and post-fire rehabilitation of areas dominated by Invasive Annual Grasses. Approximately 91 percent of the footprint-acres of these vegetation types would be restored and approximately 9 percent of their footprint-acres would be rehabilitated.

Vegetation treatments would focus on the Low-elevation and Mid-elevation Shrub, Invasive Annual Grass, Perennial Grass, and Mountain Shrub cover types, as well as sagebrush steppe invaded by juniper. Mechanical, chemical, and seeding treatments would be emphasized. RxFire would be used primarily to prepare areas for seeding and to create mosaics for the improvement or enhancement of sagebrush steppe habitats, but would also be used in vegetation types where more fire is desired. Restoration priorities would be identified to enlarge and reconnect sagebrush steppe habitat.

This alternative was developed using the following approach:

- Manage fuels and fire across the sagebrush steppe landscape to provide habitat for a variety of sagebrush-obligate wildlife species as well as other resource benefits. Progress made toward DFC would result in improved habitat for sagebrush steppe obligate species.
- Maintain treatment levels at the same rate as the historical fire rotation for the Aspen/Conifer, Dry Conifer, Mountain Shrub, Mid-elevation Shrub encroached by juniper, and Dry Conifer (i.e., the acreage treated over 10 years corresponding to the burned acreage expected over 10 years under historical conditions).
- Replicate historical disturbance patterns and successional patterns as closely as possible by applying vegetation treatments in historically frequent fire regimes.
- Regardless of vegetation type, consider treatments to protect life and property in and around WUI areas if it is deemed that life and property are at risk.
- After 10 to 15 years of treatment, wildland fires would burn less frequently and would burn smaller acreages than they currently do in Low-elevation Shrub, Perennial Grass, and Invasive Annual Grass cover types. This shift would be due to:
    - More proactive restoration in areas dominated by non-native annual species.
    - More ESR treatments following wildland fire in areas invaded and/or dominated by non-native annual species.
    - Strategic placements of restoration treatments to protect Low-elevation Shrub vegetation types.

2.4.9.1 Alternative E - Assumptions

Over a 10-year period, under this alternative, up to approximately 1,538,000 footprint-acres would be treated (approximately six times the acreage in Alternative A). It is assumed that Alternative E would not be limited by existing operations capabilities and resources.

2.4.9.2 Alternative E - Goals/Objectives and Management Actions[2]

Goal/Objective 1 - Make progress toward DFC in the Low-elevation Shrub, Perennial Grass, Invasive Annual Grass, Mid-elevation Shrub, Mountain Shrub, and Juniper vegetation types.

Management Actions

- Use chemical, mechanical, seeding, and RxFire treatments as appropriate to achieve DFC.
- In Perennial Grass, Invasive Annual Grass, and juniper-invaded cover types, restore the sagebrush steppe with an aggressive sagebrush seeding effort, using the appropriate sagebrush subspecies for the treatment area.
- Strategically place treatments on a landscape scale to prevent fire from spreading into important sagebrush steppe habitat or WUI.

Goal/Objective 2 - Maintain, protect, and expand sage grouse source habitats.

Management Actions

- Suppress wildland fires in source habitats (Figure 3-3), except where WFU would benefit habitat.
- Allow WFU in sage grouse source habitats for the benefit of the habitat only after site-specific project level coordination with IDFG (Figure 3-3).
- Conduct vegetation treatments in areas that pose a wildland fire risk to source habitats.
- Treat areas within source habitats that have low resiliency (i.e., areas characterized by low species diversity, undesirable composition, and dead or decadent sagebrush).
- Following wildland fire, WFU and RxFire treatments, use chemical, mechanical, and seeding treatments with appropriate plant materials to attempt to stabilize sites and prevent dominance of invasive, annual vegetation, and noxious weeds. Use native plant materials where determined to be appropriate and practical at the project-implementation level.

Goal/Objective 3 - Treat sage grouse key and restoration habitats to expand source habitats. Improve and maintain sage grouse Restoration (R1-3) and key habitats.

Management Actions

- Use appropriate management response to wildland fire in all sage grouse restoration and key habitats and healthy wildlife habitats.
- WFU may be allowed in historically frequent fire regimes to restore fire's natural role and in sage grouse restoration and key habitats for the benefit of the habitat only after site-specific project level consultation/collaboration with IDFG (Figure 3-3).

[2] The Proposed Plan Amendment (Alternative E) is described in broader terms in the BA (Appendix O) to better differentiate impacts to federally listed species. These broader descriptions are associated with sagebrush steppe habitat that also serves as sage grouse source, key, and restoration habitat. Specifically, Goals 2 and 3 and the Prioritization Criteria in the BA describe these specific sage-grouse habitat types in broader ecological terms such as "sagebrush steppe" and "important or healthy wildlife habitat." This did not change the effects analysis of the federally listed species as presented in the BA.

- Conduct vegetation treatments in restoration and key habitats to reduce risk of wildland fire and reconnect restoration and key habitats.
- Treat areas of restoration and key habitats that have low resiliency characterized by low species diversity.

Goal/Objective 4 - Make progress toward DFC in historically frequent fire regimes (Aspen/Conifer, Dry Conifer, Mid-elevation Shrub encroached by juniper, Mountain Shrub) by increasing WFU and RxFire to create a fire regime within the historical range of variability.

Management Actions

- Use mechanical and chemical treatments to prepare areas in FRCC 2 and FRCC 3 for RxFire and WFU.
- Where prescriptive parameters, resource conditions, and vegetation conditions allow, use WFU or RxFire to increase the annual average number of wildland fire acres to an average similar to historical conditions. Current policy and appropriate NEPA requirements would be followed prior to implementation.
- Following wildland fire, WFU and RxFire treatments, use chemical, mechanical, and seeding treatments with appropriate plant materials to attempt to stabilize sites and prevent dominance of invasive, annual vegetation, and noxious weeds. Use native plant materials where determined to be appropriate and practical at the project-implementation level.

Goal/Objective 5 - In the Wet/Cold Conifer vegetation type and/or areas in FRCC 1, maintain vegetation conditions using mechanical, chemical, RxFire, or WFU treatments, such that wildland fire regimes are within the historical range of variability (i.e., maintain the current fire regime in these vegetation types).

Management Action

- Use treatments, as appropriate, to maintain landscapes in FRCC 1.

2.4.9.3 Alternative E - Prioritization Criteria

When multiple wildland fire ignitions occur, the criteria for establishing suppression priorities would follow the two prioritization criteria described under Section 2.4.4.1, followed by the following prioritization:

- Minimize risks to sage-grouse source, key, and restoration habitats.
- Minimize risks to habitats occupied by T&E species.
- Minimize risks to resources where changes in fuel accumulation and fire occurrence have occurred (i.e., FRCC 2 and FRCC 3 areas).

Criteria for establishing vegetation treatments are:

- Design landscape-scale projects to reduce the combined risk to human life/property and resources (e.g., where WUI and ecosystems at risk coincide).

- In designing vegetation treatments in Low- and Mid-elevation Shrub and Mountain Shrub that could potentially affect Greater Sage-grouse, conservation measures identified in Appendix R would be implemented.
- The planning, designing, and monitoring of WUI and landscape level projects would be accomplished through interagency planning (BLM and USFS) with active local community participation, and through the development of partnerships.

2.4.9.4 Alternative E - Wildland Fire Use (WFU) Areas

Approximately 1.7 million acres across the planning area would be identified as suitable for WFU for resource benefit, and approximately 3.3 million acres would be identified as not appropriate due to ecological, social, economic, political, and resource constraints which is identical to Alternative C. The locations of areas that are not appropriate for WFU are shown in Figure 2-2. Appendix D identifies the specific WFU suitable/not appropriate acres by field office.

2.4.9.5 Alternative E - Treatment Levels

To implement Alternative E, 1,538,000 footprint-acres would be treated over a 10-year period. Table 2-11 identifies the vegetation type/acres and footprint-acres and graphically illustrates the broad treatment levels (treatment-acres) for the various treatment methods (i.e., WFU, mechanical and chemical treatment, RxFire, and seeding). Table 2-10 below summarizes treatment acres by treatment type for Alternative E:

TABLE 2-10. PLANNING AREA TOTAL FOOTPRINT AND TREATMENT ACRES BY TREATMENT TYPE, ALTERNATIVE E

Footprint Acres	Wildland Fire Use	Mechanical	Chemical	RxFire	Seeding
1,538,000	19,300 [1]	1,338,000	1,504,000	692,000	1,486,000

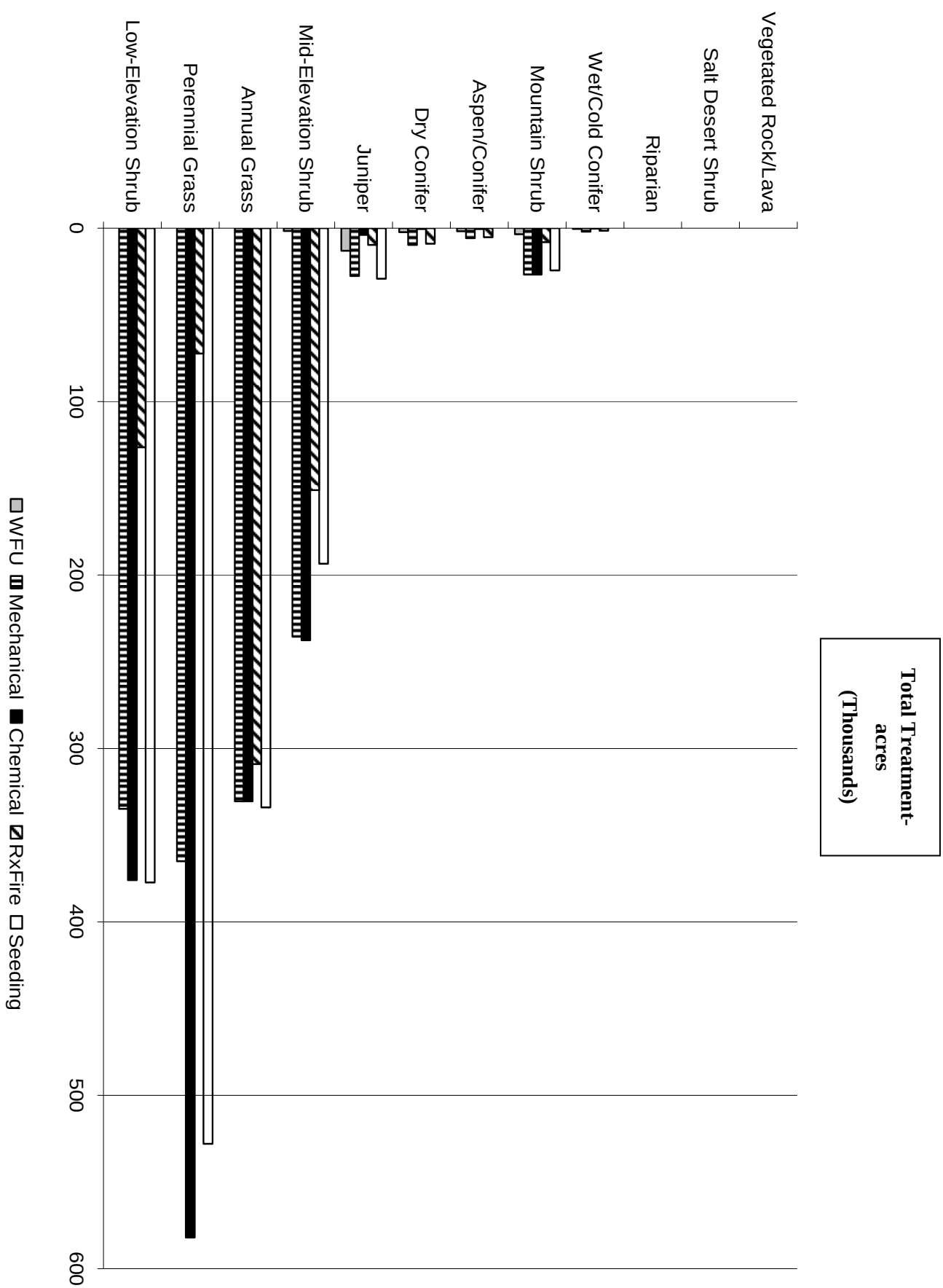
[1] Approximately 19,300 acres in Aspen/Conifer, Dry Conifer, Mountain Shrub and Juniper to improve sage grouse habitat.

Alternative E treatment levels were established by wildlife biologists and fire ecologists who determined treatment levels needed to (1) maintain existing, high-quality sagebrush steppe habitat and to increase the quantity of sagebrush steppe in shrub steppe ecosystems and (2) replicate historical disturbance rates and succession patterns for the vegetation types of the planning area where more fire is desired, while protecting the WUI to meet the goals and priorities set in the Cohesive Strategy.

2.4.9.6 Alternative E - Management Restrictions

Alternative E would have identical management restrictions to those common to all alternatives previously described in Section 2.4.2.1, Management Restrictions, and detailed in Appendix Q.

TABLE 2-11. ALTERNATIVE E - VEGETATION TYPE AND 10-YEAR TOTAL TREATMENT ACRES BY TREATMENT TYPE



2.5 IMPLEMENTATION, MONITORING, EVALUATION, AND ADAPTIVE MANAGEMENT

2.5.1 IMPLEMENTATION

The following discussion of monitoring, evaluation, and adaptive management applies to the implementation of the Proposed Plan Amendment, Alternative E.

The FMDA analysis is broad and uses DFC and FRCC analysis as a broad level assessment of the condition of vegetation. The FMDA is thus intended to provide broad programmatic direction for future fire, fuels, and related vegetation management of the Upper Snake River Plain and surrounding lands. The analysis is based upon best available scientific information and methods. It is not designed for project-level or site-specific decision-making. Additional mid-scale and site-specific analysis would be undertaken in subsequent planning efforts (i.e., RMP revisions, FMPs, project plans). For these reasons, the following chapter sets forth guidance for implementing the Proposed Plan Amendment only.

The acreages intended for treatment and described in each alternative are to be viewed as scenarios that reflect broad treatment levels for the purposes of comparison of alternatives and effects assessment. Once an alternative or broad treatment level is selected, actual projects and acres to be treated would be identified by field office personnel based on site-specific information. Field office personnel would set treatment priorities based upon their knowledge of the conditions and needs of the land. Site-specific NEPA-documents would be prepared for all fuels, ESR, and other vegetation management treatments. Where WFU is deemed suitable, these areas would not be available for WFU (fire starts would be suppressed using AMR) until site specific analyses and NEPA-documents are complete. Site-specific plans would identify management goals, prescriptive parameters, mitigation measures, objectives, and actions for an area that is suitable for WFU. Analysis of the effects of WFU would be completed during the site-specific NEPA process.

Field office and fire management staff would implement plan amendment direction. Field office ID teams, including both fire and resource specialists, would plan and analyze specific projects. The development of each project incorporating WFU, RxFire and non-fire vegetation treatments would include public involvement and the preparation of a NEPA document for each project to be implemented.

Within the scope of this analysis, the FMDA is designed to allow for adaptive management. Adaptive management would allow project planners the flexibility to respond to changes in resource conditions or as new information becomes available from continued monitoring and evaluation. The assumptions set forth above provide the guidance to focus on needs identified on the ground as they are considered on a project-by-project basis.

2.5.2 MONITORING AND EVALUATION

Any part of the above alternatives that might be selected for implementation would have a monitoring component. Accomplishing management objectives outlined in this plan would be

determined through the collection of data at a programmatic level. Data used in this analysis to determine current conditions and analyze effects (average annual acres of wildland fire, number of fire starts, and WFU/ESR/vegetation/fuels treatment acres, collected over a 10-year period) would be used to confirm that management actions are leading toward DFC and other plan amendment objectives.

Monitoring data would be compiled and analyzed by field office personnel and summarized by field office. Monitoring data would be evaluated as needed to detect changes in current conditions and answer specific management questions aimed at determining whether the proposed management actions are meeting plan amendment objectives. The proposed monitoring and evaluation plan for the Proposed Plan Amendment is described in Table 2-12.

The general FMDA plan monitoring and evaluation strategy includes the following:

- Reassess percent of landscape existing by vegetation type, by age class using large fire, and vegetation treatment data.
- Recalculate current conditions and compare the DFC at the field office level when RMP revision is completed.
- Calculate how many fires have occurred and how many acres have burned and been treated in WUI.
- Summarize results in a 10-year report.

Field office managers would ensure data is collected and would evaluate periodically to determine, among other things, the need for revising this proposed amendment. As policy dictates, wildfire, WFU, and vegetation treatment locations and acres would be recorded. Formal evaluation and reporting would occur every 10 years, unless field office managers deem a shorter timeframe warranted by changes in vegetation condition (i.e., above average annual acreage burned by wildfire). The 10-year report would include a summarization of the above mentioned data and analysis of this data to determine whether resource conditions have moved toward DFC and/or have met other management objectives outlined in this amendment.

In addition to the programmatic monitoring plan described above, monitoring would also be completed at the site-specific level, which would be used to determine if treatments have been successful and if conditions are moving toward site-specific objectives. Site specific monitoring would be performed in compliance with the field office Normal Fire Rehabilitation Plans (NFRPs) for ESR. Pro-active vegetation management treatments would be monitored at the site-specific level following BLM state and national protocols outlined in handbooks and policy.

As future resource management planning efforts are undertaken at the field office level, analysis methods may change. As a result, monitoring methods may change. Even though analysis and monitoring methods may change in future planning efforts, broad-scale programmatic monitoring as described above would continue over the life of this amendment.

TABLE 2-12. FMDA AMENDED LUP MONITORING AND EVALUATION PLAN

Goal/ Objective	Question?	Parameters Monitored	Monitoring Activity		Indicator	Reporting Frequency
Vegetation types are moving toward their historic range of age class variability and distribution across the landscape.	Are management activities moving vegetation toward DFC?	Vegetation/Fuel Age Class for: • Low-elevation shrub • Mid-elevation shrub • Mountain shrub • Aspen/Conifer/Dry Conifer • Salt desert shrub • Vegetated rock • Wet/Cold Conifer	Collect wildland fire, WFU, ESR and pro-active vegetation treatment perimeter data and year of occurrence in geographical information systems (GIS).	Vegetation/ Fuel age class acreage and percent by vegetation type.	Every 10 years or more frequently if vegetation conditions warrant.	
		Uncharacteristic vegetation acres	Use satellite imagery and/or field surveys to re-map cheatgrass and noxious weed acres.	Total cheatgrass and noxious weed dominated acreage and percent by vegetation type.	Every 10 years or more frequently if vegetation conditions warrant.	
Sage grouse source habitat is being protected or enhanced.	Are management activities resulting in improvement in sagebrush steppe?	Vegetation/Fuel Age Class for: • Low-elevation shrub • Mid-elevation shrub • Mountain shrub	Collect wildland fire, WFU, ESR and pro-active vegetation treatment perimeter data and year of occurrence in GIS.	Vegetation/ Fuel age class acreage and percent by vegetation type.	Every 10 years or more frequently if vegetation conditions warrant.	
		Uncharacteristic vegetation acres	Use satellite imagery and/or field surveys to re-map cheatgrass and noxious weed acres.	Total cheatgrass and noxious weed dominated acreage and percent by vegetation type.		
Decrease fire frequency and size in the vicinity of the WUI.	Are management activities reducing fire risk to WUI?	Wildland Fire occurrence in WUI.	Map fire starts and calculate number of fire starts within each WUI polygon.	Total number of fire starts per year by WUI polygon.	Every 10 years or more frequently if vegetation conditions warrant.	
		Average fire size in WUI.	Map large fires[1] and calculate average fire size within each WUI polygon.		Total acres burned and average fire size by WUI polygon.	

[1] Large fire is defined as any wildfire on BLM-administered public lands that is greater than 10 acres in size. Current BLM policy requires that large fires be recorded annually in GIS.

2.5.3 Adaptive Management

Adaptive management is a rational approach to decision-making in natural resource management. Adaptive management of natural resources is fueled by a monitoring program that acts as an early-warning system for resource problems, and which facilitates the evaluation and planning phases in deciding which actions to implement. Under adaptive management, planning decisions and implementation actions are based upon real-world information and data. Adaptive management is a cyclic, active feedback process (Figure 2-3) with four important components: (1) planning, (2) implementation, (3) monitoring, and (4) evaluation. No one component is more important than the others, though information gained through periodic monitoring and evaluation keeps this process cycling. Adaptive management only occurs when all four activities are regularly performed. The constant feedback nature of adaptive management facilitates management flexibility and reduces the chances of missed opportunities.

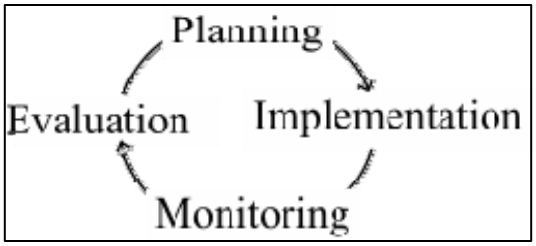


Figure 2-3. Diagram of the adaptive management cycle.

Monitoring (data collection) and evaluation (data analysis) are critical to gaining reliable information and data about natural resources, which are essential for rational planning decisions to implement new management actions or maintain present activities.

As a decision-making process, adaptive management evaluates the outcomes of management actions, and then uses this information to direct or change management. Approached in this manner, management actions/activities are treated as working hypotheses, not final solutions to complex ecological problems. Monitoring and evaluation provide continued feedback (information and data), upon which a resource manager can make informed decisions. An effective monitoring program keeps resource managers abreast of current conditions and gives them the information and data to adapt management actions/activities to changing resource conditions.

In other words, adaptive management facilitates corrective management actions intended to repair ecosystem functions and processes. Evaluation tests whether management actions are achieving expected results or not. When results are being achieved, management actions continue unchanged. If management actions are determined to be ineffective or even counter-productive, adaptive management can redirect management actions to better achieve goals/objectives. Assuming that an ecosystem is healthy, adaptive management can facilitate maintaining ecosystem processes within normal fluctuations of climate and environment. Adaptive management requires monitoring and evaluation to feed the decision process.

Adaptive management in this case means analyzing, monitoring, and evaluating the broad-scale indicators outlined in Table 2-12 above. Every 10 years, answers to the management questions

would be provided in a report. If management objectives are not being met, the objectives set forth in this analysis would be re-evaluated to determine if plan amendment is necessary.

2.6 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER ENVIRONMENTAL ANALYSIS

Issues and impacts of concern involving the proposed action were identified through the scoping process. Alternatives to the proposed action were developed to provide several ways of addressing the scoping issues and reducing potential environmental impacts, while still achieving the identified purpose and need of the project. Several alternatives for meeting the purpose and need were suggested during the scoping process. Some of these alternatives were considered and subsequently eliminated from detailed analysis for various reasons. Descriptions of these alternatives and rationales for their elimination are given below.

The alternative of altering or eliminating grazing practices was suggested in the scoping process. While this is closely tied to vegetation conditions and treatments, it does not, in itself, meet the purpose and need of the proposed project. Therefore, it was not considered further as an alternative. Grazing management as described in the existing LUP direction has been incorporated in this EIS and is included in the impacts to resources analysis of Chapter 4, Environmental Consequences. The BLM analyzes grazing under NEPA in association with Resource Management Plan revisions or at the project level following Standard and Guide assessment, evaluation and determination.

A scoping respondent suggested that the BLM consider an alternative that would use several passive treatments for fire management. These treatments include using livestock grazing to reduce invasive species, reducing livestock usage in areas with known non-native infestations, removing livestock facilities, and closing roads and off-road vehicle trails. This alternative was eliminated from detailed analysis because it involves decisions beyond the scope of the EIS. All of these uses are part of the BLM's multiple-use mandate, and eliminating grazing or off-road recreational access is out of the scope of this process and may be addressed during the planning area field offices' LUP revision process.

A Resource Restoration Emphasis alternative was suggested. This alternative would emphasize the active restoration of rangeland habitats, wetlands, riparian, and aquatic areas. This alternative was eliminated from detailed analysis because it involves elements that are not part of the purpose and need of the project. The project purpose and need involves ESR and restoration, but only as they relate to fire management. Non-fire related restoration of rangeland, wetlands, riparian, and aquatic areas is outside of the scope of this project and this EIS analysis.

2.7 REASONABLY FORESEEABLE FUTURE ACTIONS

As stated in Chapter 1, Purpose and Need, there are several planning efforts going on within the planning area. These would result in decisions that could have a cumulative impact on resources within the planning area. The reasonably foreseeable future actions resulting from these planning efforts are described below.

2.7.1 IDAHO NATIONAL LABORATORY (DEPARTMENT OF ENERGY, IDAHO OPERATIONS OFFICE [DOE-ID], INL)

As stated in Chapter 1, Purpose and Need, the DOE-ID, in conjunction with the BLM has prepared a management plan for the Sagebrush Steppe Ecosystem Reserve (SSER). DOE-ID completed the Final *Idaho National Engineering and Environmental Laboratory Wildland Fire Management Environmental Assessment* in April 2003. Decisions arising from these planning efforts would be considered in fire management on the INL, grazing, the sagebrush steppe cover types, and wildlife.

2.7.2 SAWTOOTH NATIONAL FOREST

The Sawtooth National Forest, which comprises approximately 2.2 million acres in south-central Idaho, and in conjunction with the Boise and Payette National Forests, revised its Forest Plan in July 2003. Part of this revision process included designating acres of land that would be treated with fire to reach forest management objectives. These objectives include: (1) treating fuels to reduce the risk of wildland fire, (2) treating fuels to achieve desired vegetation conditions, (3) treating fuels generated from management activities, and (4) habitat improvement. Reasonably foreseeable fire management projects on the Sawtooth National Forest include at least 40,000 acres of fuels management over the next decade, focusing on the WUI areas. These fuels management treatments would use a combination of fire and mechanical treatments to reduce fuels and restore and maintain forested vegetation types.

2.7.3 CARIBOU AND TARGHEE NATIONAL FORESTS

Reasonably foreseeable fire management projects on the Targhee National Forest include approximately 2,000 acres per year of fuels reduction, as per the 1997 Forest Plan. These reductions would occur through both fire and mechanical treatments (USFS 2003a).

The Caribou National Forest completed its Forest Plan in February 2003. The fuels treatment goal in the new plan is 7,000 acres per year to 7,500 acres per year. The plan states the 10-year annual average fuels treatment would be (1) 3,500 acres of fire and mechanical treatment in forested habitat, and (2) 4,000 acres of fire and mechanical treatments in non-forested habitat.

Of the 3,525 acres of forested habitat treated, 1,375 acres would be within the WUI, and 2,150 acres would be outside the WUI. The majority of the area within the WUI would be treated by mechanical methods and outside the WUI would be treated primarily with RxFire (USFS 2003a).

Although the combined treatment goal for the Caribou and Targhee National Forests is approximately 9,000 acres, the average combined acreage treated over the past several years has been 2,500 to 3,000. Approximately 39 percent (975 acres to 1,170 acres) has been in the WUI, and approximately 61 percent (1,525 acres to 1,830 acres) has been outside the WUI. Accordingly, future treatments in the WUI would approximately triple the amount of past treatments. It is likely that both forests would continue a trend toward additional treatments within the WUI, as well as additional mechanical treatments overall (USFS 2003a).

2.7.4 IDAHO DEPARTMENT OF LANDS (IDL)

In May 2002, the IDL, in conjunction with the BLM and other federal agencies, signed the Idaho Statewide Implementation Strategy for the National Fire Plan. The implementation plan focuses on fire preventions and suppression, hazardous fuels reduction, restoration of fire-adapted ecosystems, and the promotion of community assistance in fire management. The strategy emphasizes a collaborative approach at the county level, encouraging the development of county risk assessments and mitigation plans with assistance from state and federal agencies. Counties are encouraged to identify fire management priorities quickly and to begin whatever actions are necessary to mitigate potential risks or vulnerabilities (IDL 2002a). During 2002, IDL, in cooperation with federal agencies, disbursed $1.9 million to WUI projects and the development of defensible space. Additional money was used for hazardous fuel condition reduction programs for several communities, including Island Park, Idaho (IDL 2002b). Developing risk assessments and mitigation plans would allow counties and communities within the planning area to determine their current fire hazard risk and to develop effective mitigation to minimize wildland urban risks to persons and property. Additionally, implementing community-based fuels reduction programs provides opportunities for private landowners to work with federal land management agencies to manage the WUI.

2.7.5 SHOSHONE-BANNOCK TRIBAL GOVERNMENTS

The Shoshone-Bannock Tribal Governments and Bureau of Indian Affairs at Fort Hall, Idaho are planning a number of projects that would reduce hazardous fuel conditions and reduce fire risks in the WUI. These projects include WUI actions at Michaud Flat (26 acres of mechanical treatment), Bannock Creek (100 acres, half mechanical and half RxFire), and Ross Fork Creek. There are also proposed hazardous fuels reduction projects for Mount Putnam (150 acres that would be mechanically treated and then RxFire treated) and the Fort Hall Bottoms (130 acres of RxFire).

2.7.6 SHOSHONE-PAIUTE TRIBAL GOVERNMENTS

BLM is currently consulting with the Shoshone-Paiute Tribal Governments at the Duck Valley Reservation, Owyhee, Nevada regarding integrating fire management on BLM lands with fire and vegetation management on reservation lands. Over the next few years, the Shoshone-Paiute Tribal Governments are planning to implement hazardous fuel condition reduction projects under the Healthy Forests Restoration Act. BLM would continue to consult with the Shoshone-Paiute Tribes as they develop their FMP and the first phase of Fire Planning Analysis (FPA) for their Northeastern Nevada Fire Planning Unit.

2.7.7 THE CRATERS OF THE MOON NATIONAL MONUMENT AND PRESERVE

The NPS and the BLM have prepared a joint monument management plan for Craters of the Moon National Monument and Preserve, which was created by Presidential Proclamation 7373 on November 9, 2000. This proclamation resulted in the transfer of BLM-administered public lands to the National Park Service (NPS). This NPS/BLM planning area is located entirely within the administrative boundary of the FMDA planning area. Fire management planning decisions for Craters of the Moon National Monument and Preserve have been determined

through the monument management planning process. Finalization of the FMDA would not amend any decisions nor affect management for the Monument and Preserve. The Craters of the Moon planning area was originally included within the Draft EIS for this plan amendment effort and both treatment and effects were described for this area in the DEIS. Since publication of the DEIS, the Craters of the Moon National Monument Management Plan (MMP) has been completed and management direction issued. The broad treatment levels described in the MMP are similar to the treatments described in the FMDA. Rather than displaying the effects separately based on this decision, the effects of treatments in the Craters of the Moon planning area have remained integrated in the analysis disclosed in Chapters 3 and 4 of this document.

2.7.8 POCATELLO LAND USE PLAN (LUP) REVISION

The Pocatello Field Office (PFO) is currently preparing a separate revision to the current applicable planning documents, which is scheduled to be completed in fiscal year (FY) 2008. Fire management direction is addressed in the Pocatello RMP revision effort and uses similar goals, objectives, management actions, and treatment levels as those described in this plan amendment. This plan amendment would not amend that RMP revision but would provide interim guidance until that revision is complete.

2.8 SUMMARY OF ALTERNATIVES AND EFFECTS

A summary of alternative elements is provided in Table 2-13. Table 2-14 summarizes impacts to resources and uses. Table 2-15 provides a summary of the effects of each alternative.

TABLE 2-13. SUMMARY OF ALTERNATIVES A THROUGH E

Alternative Elements	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Management Common To All Alternatives	Suppression restrictions were developed for the following resource disciplines: • Fire Management • Cultural Resources and Historic Trails • Noxious Weeds • Human life, human communities, infrastructure, and property • Recreation • Riparian Areas • Special Designations (wilderness study areas [WSAs], Areas of Critical Environmental Concern [ACECs]) • Vegetation The following fire and non-fire vegetation treatment restrictions would be applied to site-specific restoration and hazardous fuels reduction treatment actions for the following resource disciplines: • Vegetation • Air Quality • Cultural Resources and Historic Trails • Hazardous Materials and Abandoned Mine Sites • Livestock Grazing • Placeholder Species • Riparian Areas • Special Management Areas • Visual Resources • Wildlife The Field Office Normal Fire Rehabilitation Plans contain ESR restrictions that would be applied to all site-specific ESR actions. The following community assistance actions would occur consistent with National Fire Plan (NFP) policy and would apply to all alternatives, including the No Action Alternative: • Continue to collaborate with local partners to assess and define Wildland Urban Interface (WUI) areas, update existing mitigation plans, and implement a prevention and education program. • Work with other federal agencies, state, county, and private entities to update County Mitigation Plans. • Provide Rural Fire Assistance (RFA), as identified in Mitigation Plans, to rural fire districts. Assess and increase suppression capabilities and effectiveness by providing RFA to local fire suppression organizations. • Provide planning and implementation assistance to private landowners so hazardous fuels can be reduced as identified in Mitigation Plans. • Provide funding to implement fire education projects identified in Mitigation Plans. • Reduce fuel hazards and the threat of wildland fire, including consideration of any local communities-at-risk.				

TABLE 2-13. SUMMARY OF ALTERNATIVES A THROUGH E

Alternative Elements	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	• Continue to collaborate with local partners to assess WUI areas and update existing mitigation plans to implement fuels treatments.				
Management Common To All Action Alternatives	**N/A**	**Goals and Objectives:** • Protect and enhance sage grouse stronghold habitats. • Protect and enhance key ecological components in plant and animal communities. • Considered mechanical and/or chemical treatments first where fire is not an appropriate tool due to risk to life, property, or resource impacts. • Move all vegetation types toward DFC and from Fire Regime Condition Class (FRCC) 2 and/or FRCC 3 toward FRCC 1. FRCC is an indicator of fire-related risk to key ecosystem components. A full description of FRCC is given in Section 3.2, Vegetation Resources and Fire's Natural Role (Issue 1). **Desired Future Condition:** *Low-elevation Shrub, Perennial Grass, and Invasive Annual Grass* Increase the number of acres with a native/placeholder shrub-grass mix. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape. Decrease the number of acres with more than 10% cheatgrass cover and/or weeds. *Mid-elevation Shrub (including Juniper encroachment acres)* Increase the number of acres with a native/placeholder shrub-grass mix. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape. Decrease the acres of Mid-elevation Shrub encroached upon by juniper, and/or any other undesirable species present. Increase acres burned to more closely approximate the historical fire regime. Improve composition and structure of Mid-elevation Shrub types to better represent historical sagebrush steppe cover types. *Mountain Shrub* Increase the acres of early-seral and mid-seral stages. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape. Increase acres burned to more closely approximate the historical fire regime. Improve composition and structure of Mountain Shrub types to better represent historical Mountain Shrub cover types. *Aspen/Conifer and Dry Conifer* Increase acres of early-seral and mid-seral Aspen/Conifer and Dry Conifer cover types (pure				

TABLE 2-13. SUMMARY OF ALTERNATIVES A THROUGH E

Alternative Elements	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
		aspen and Aspen/Conifer mix). Spatial arrangement of varying age-classes should occur in a mosaic across the landscape. Increase acres burned to more closely approximate the historical fire regime. Improve composition and structure of Aspen/Conifer and Dry Conifer types to better represent historical Aspen/Conifer and Dry Conifer cover types. *Salt Desert Shrub* Maintain or increase acres with a native/placeholder shrub-grass mix. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape. Decrease acres with cheatgrass, weeds, and/or other undesirable species present. Maintain fire frequency and size to approximate the historical fire regime. Maintain or improve Salt Desert Shrub types to better represent those historical cover types. *Vegetated Rock/Lava* Maintain or increase acres with a native/placeholder shrub-grass mix. Spatial arrangement of varying age-classes should occur in a mosaic across the landscape. Decrease acres with cheatgrass, weeds, and/or other undesirable species present. Maintain fire frequency and size to approximate the historical fire regime. Maintain Vegetated Rock/Lava types to better represent those historical cover types. *Wet/Cold Conifer* Maintain the mix of early, mid, and late seral stands of lodgepole pine forest. Maintain fire frequency and size to approximate the historical fire regime. Maintain or improve Wet/Cold Conifer types to better represent those historical cover types. *WUI* Decrease fire frequency and size in the vicinity of the WUI to protect public and fire-fighter safety, public resources, and private lands. Decrease fire hazard from high to moderate or low by implementing vegetation treatments and actions outlined in County/Community Mitigation Plans. **Prioritization Criteria:** Following are the top two priorities under all four action alternatives: 1. Fire-fighter and public safety are the first priority in response to fire suppression. At no time would the activities described in this EIS compromise fire-fighter and public safety. 2. The protection of property and WUI is the second top priority. Vegetation treatment priorities in non-WUI areas would vary by field office as vegetation types			

TABLE 2-13. SUMMARY OF ALTERNATIVES A THROUGH E

Alternative Elements	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
		vary across the planning area. In general, vegetation treatment priorities include the following: • Diversify Perennial Grass to speed reestablishment of sagebrush cover. • Enhance structural and species diversity in degraded Low-elevation sagebrush steppe. • Reduce shrub and juniper density in Mid-elevation Shrub. • Reduce invasive or noxious weeds in all vegetation types. • Rejuvenate aspen stands, reduce insect infestation and disease, and create a diversity of forest successional stages across the landscape. In Mountain Shrub, rejuvenate old, decadent shrubs and increase cover and density of desirable herbaceous species.			
Management Goals/Objectives	**Goal/Objective 1:** Emphasize protection from and rehabilitation after wildland fire within the WUI.	**Goal/Objective 1:** Make progress toward DFC in Low-elevation Shrub, Perennial Grass, and Invasive Annual Grass cover types where wildland fire should be occurring less frequently and at a smaller scale.	**Goal/Objective 1:** Make progress toward DFC in Low-elevation Shrub, Perennial Grass, and Invasive Annual Grass cover types so that wildland fire occurs less frequently than currently and at a smaller scale on the landscape. Reduce by half the number of wildland fires in these cover types to create a wildland fire regime within the historical range of variability.	**Goal/Objective 1:** Make progress toward DFC in the Low-elevation Shrub, Perennial Grass, Invasive Annual Grass, Mid-elevation Shrub, Mountain Shrub and Juniper vegetation types.	**Goal/Objective 1:** Make progress toward DFC in the Low-elevation Shrub, Perennial Grass, Invasive Annual Grass, Mid-elevation Shrub, Mountain Shrub, and Juniper vegetation types.

TABLE 2-13. SUMMARY OF ALTERNATIVES A THROUGH E

Alternative Elements	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	Goal/Objective 2: Reduce fine fuels and undesirable non-native plants and create perennial cover types so that wildland fires occur less frequently and at a smaller scale.	**Goal/Objective 2:** Make progress toward DFC in the Mid-elevation Shrub, Juniper, Dry Conifer, Aspen/Conifer, and Mountain Shrub cover types, where wildland fire should be occurring more frequently on the landscape.	**Goal/Objective 2:** Make progress toward DFC in the Mid-elevation Shrub, Juniper, Dry Conifer, Aspen/Conifer, and Mountain Shrub cover types by increasing WFU and RxFire to create a fire regime within the historical range of variability.	**Goal/Objective 2:** Maintain, protect, and expand sage grouse source habitats.	**Goal/Objective 2:** Maintain, protect, and expand sage grouse source habitats.
	Goal/Objective 3: Conduct fire and non-fire vegetation treatments in Mid-elevation Shrub, Juniper, Dry Conifer, Aspen/Conifer, and Mountain Shrub.	**Goal/Objective 3:** Maintain or make progress toward DFC in the Wet/Cold Conifer, Salt Desert Shrub cover and in vegetation types where fire frequencies are within the historical range of variability.	**Goal/Objective 3:** In Wet/Cold Conifer, Riparian, Salt Desert Shrub, and Vegetated Rock/Lava vegetation and/or areas in FRCC 1, maintain vegetation conditions using mechanical, chemical, RxFire, or WFU treatments, such that wildland fire regimes are within the historical range of variability (i.e., maintain the current level of fire in these cover types).	**Goal/Objective 3:** Treat sage grouse key and restoration habitats to expand source habitats. improve and maintain sage grouse Restoration (R1-3) and key habitats.	**Goal/Objective 3:** Treat sage grouse key and restoration habitats to expand source habitats. Improve and maintain sage grouse Restoration (R1-3) and key habitats.

TABLE 2-13. SUMMARY OF ALTERNATIVES A THROUGH E

Alternative Elements	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
					Goal/Objective 4: Make progress toward DFC in historically frequent fire regimes (Aspen/Conifer Dry Conifer, Mid-elevation Shrub encroached by Juniper, Mountain Shrub) by increasing WFU and RxFire to create a fire regime within the historical range of variability. **Goal/Objective 5:** In the Wet/Cold Conifer vegetation type and/or areas in FRCC 1, maintain vegetation conditions using mechanical, chemical, RxFire, or WFU treatments, such that wildland fire regimes are within the historical range of variability (i.e., maintain the current fire regime in these vegetation types).

TABLE 2-13. SUMMARY OF ALTERNATIVES A THROUGH E

Alternative Elements	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Suppression and Treatment Priorities	**Suppression Priorities:** Protect human life, human communities, infrastructure, property, cultural and natural resources, WUI, and stronghold, isolated, and key sage-grouse habitat. Minimize the costs of wildland fire suppression	**Suppression Priorities:** Minimize risk to sagebrush steppe, Dry Conifer.	**Suppression Priorities:** Minimize risk to Low-elevation Shrub where frequent, uncharacteristic fires occur; minimize risk to other vegetation types where changes in fuel accumulation and fire occurrence have occurred	**Suppression Priorities:** Minimize risk to source, key, and restoration sage grouse habitat.	**Suppression Priorities:** Minimize risk to source, key, and restoration sage grouse habitat. Minimize risk to threatened, endangered, and candidate species habitat. Minimize risk to resources where changes in fuel accumulation and fire occurrence have occurred.
	Treatment Priorities: Use RxFire and non-fire fuels treatments to improve or enhance FRCC 2 and FRCC 3 acres where public safety or WUI are at risk.	**Treatment Priorities:** Protect/maintain and restore sagebrush steppe, restore Aspen/Conifer, Mountain Shrub, Dry Conifer, and protect areas of key ecosystem components at high risk of loss.	**Treatment Priorities:** Design landscape-scale projects to reduce the combined risk to human life/property and resources; design landscape level projects in conjunction with community participation and the development of stakeholder partnerships.	**Treatment Priorities:** Within sage grouse source habitat, treat areas of low resilience. Within Key and restoration habitat: a) Treat areas adjacent to source habitat, b) Enhance key habitat, c) Treat areas that pose a fire risk to source and key habitats, d) Treat areas adjacent to key habitat.	**Treatment Priorities:** Design landscape-scale projects to reduce the combined risk to human life/property and resources; Design vegetation treatments potentially affecting Greater sage-grouse (in Low-elevation Shrub, Mid-elevation Shrub, and Mountain Shrub), conservation measures identified in Appendix R would be considered.

TABLE 2-13. SUMMARY OF ALTERNATIVES A THROUGH E

Alternative Elements	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	Use RxFire and non-fire fuels treatments to maintain FRCC 1 acres where hazardous fuels pose a risk to public or firefighter safety. Use RxFire and non-fire fuels treatments to improve or enhance FRCC 2 or FRCC 3 acres where sage-grouse habitat, wildlife areas of concern, or other resources are at risk.				In the WUI, where practical and appropriate, design landscape level projects in conjunction with community participation and the development of stakeholder partnerships in the planning and monitoring processes.
Wildland Fire Use (WFU) Areas (approximate)	**WFU (Suitable):** 0 acres **No WFU (Not Appropriate):** 5.0 Million	**WFU:** 2.9 Million **No WFU:** 2.1 Million	**WFU:** 1.7 Million **No WFU:** 3.3 Million	**WFU:** 400,000 **No WFU:** 4.6 Million	**WFU:** 1.7 Million **No WFU:** 3.3 Million
Broad Treatment Levels (10-year planning period)	**Footprint:** 250,200 acres **WFU:** 0 acres **Mechanical:** 10,700 **Chemical:** 223,000	**Footprint:** 646,000 acres **WFU:** 112,200 acres **Mechanical:** 64,300 acres **Chemical:** 426,100	**Footprint:** 1,687,000 acres **WFU:** 130,000 acres **Mechanical:** 136,000 acres **Chemical:** 993,000	**Footprint:** 1,522,000 acres **WFU:** 14,800 acres **Mechanical:** 1,320,000acres **Chemical:** 1,503,000	**Footprint:** 1,538,000 acres **WFU:** 19,300 acres **Mechanical:** 1,338,000 acres **Chemical:** 1,504,000 acres

TABLE 2-13. SUMMARY OF ALTERNATIVES A THROUGH E

Alternative Elements	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	RxFire: 36,600 acres **Seeding:** 256,800	**RxFire:** 356,000 acres **Seeding:** 620,900	**RxFire:** 1,035,000 acres **Seeding:** 1,161,000	**RxFire:** 677,000 acres **Seeding:** 1,486,400 acres	**RxFire:** 692,000 acres **Seeding:** 1,486,000 acres
Fire Management Restrictions	See Management Common To All above.	See Management Common To All above.	See Management Common To All above.	See Management Common To All above.	See Management Common To All above.

TABLE 2-14. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 1[3]

Vegetation Cover Types	Field Offices																			
	Upper Snake					Pocatello					Burley					Shoshone				
	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
Vegetation - Cohesive Strategy (Issue 1): Fire Regime Condition Class (FRCC) achieved by alternative after 30 years in respective field offices.																				
LES[1], Perennial, Annual	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2
MES[2], Juniper	3	2	1	2	2	3	3	1	2	2	3	2	1	2	2	3	3	1	2	2
Salt Desert Shrub	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	NA	NA	NA	NA	NA
Aspen/Conifer, Dry Conifer	2	3	2	3	2	3	2	2	3	2	3	2	1	3	1	3	2	2	3	2
Mountain Shrub	3	2	1	3	3	3	1	1	1	1	3	2	1	2	2	3	2	1	2	2
Wet/Cold Conifer	2	2	1	2	1	2	2	2	2	2	2	2	1	2	1	2	2	1	2	1
Vegetated Rock/Lava	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Notes:

FRCC 1 = low risk of losing key ecosystem components; FRCC 3 = high risk of losing key ecosystem components.

There are no treatments proposed for the Riparian cover type in any of the five alternatives. However, they may receive some treatment depending on the needs of the adjacent cover types.

[1] LES = Low-elevation Shrub

[2] MES = Mid-elevation Shrub

[3] Not Applicable (NA): Shoshone has no vegetation mapped as Salt Desert Shrub.

[3] All effects summarized in this and subsequent tables and/or text are abbreviated displays of detailed effects analysis described in Chapter 4 of this EIS.

TABLE 2-14. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 1

Vegetation Cover Types	Alternatives				
	A	B	C	D	E
Vegetation - Cohesive Strategy (Issue 1): Planning Area Fire Regime Condition Class (FRCC) achieved by alternative after 30 years.					
Low-elevation Shrub, Perennial, Annual	2-3	2	2	2	2
Mid-elevation Shrub, Juniper	3	2-3	1	2	2
Salt Desert Shrub	1	1	1	1	1
Aspen/Conifer, Dry Conifer	2-3	2-3	1-2	3	1-2
Mountain Shrub	3	1-2	1	1-3	1-3
Wet/Cold Conifer	2	2	1-2	2	1-2
Vegetated Rock/Lava	1	1	1	1	1

Notes:

FRCC 1 = low risk of losing key ecosystem components; FRCC 3 = high risk of losing key ecosystem components.

There are no treatments proposed for the Riparian cover type in any of the five alternatives. However, they may receive some treatment depending on the needs of the adjacent cover types.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Sagebrush Wildlife Guild Habitats[4] (Issue 2)	Under all alternatives, the proportion of Source Habitat that would be disturbed by vegetation treatments indicates habitat loss over the short term for the Sagebrush Guild. The percentage of mature, Low-elevation Shrub at 30-years old, or more, provides an assessment of long-term benefits to the Sagebrush Guild.				
	Upper Snake Field Office (USFO): Source Habitat disturbed in first 10 years: 0% Mature shrub at 30 years: 37% **Pocatello Field Office (PFO):** Source Habitat disturbed in first 10 years: 0% Mature shrub at 30 years: 20% **Burley Field Office (BFO):** Source Habitat disturbed in first 10 years: 0% Mature shrub at 30 years: 12%	**USFO:** Source Habitat disturbed in first 10 years: 6.9% Mature shrub at 30 years: 28% **PFO:** Source Habitat disturbed in first 10 years: 0% Mature shrub at 30 years: 20% **BFO:** Source Habitat disturbed in first 10 years: 2.6% Mature shrub at 30 years: 15%	**USFO:** Source Habitat disturbed in first 10 years: 7.7% Mature shrub at 30 years: 40% **PFO:** Source Habitat disturbed in first 10 years: 23.5% Mature shrub at 30 years: 22% **BFO:** Source Habitat disturbed in first 10 years: 13.7% Mature shrub at 30 years: 21%	**USFO:** Source Habitat disturbed in first 10 years: 9.9% Mature shrub at 30 years: 41% **PFO:** Source Habitat disturbed in first 10 years: 15.7% Mature shrub at 30 years: 25% **BFO:** Source Habitat disturbed in first 10 years: 12.4% Mature shrub at 30 years: 21%	**USFO:** Source Habitat disturbed in first 10 years: 9.9% Mature shrub at 30 years: 41% **PFO:** Source Habitat disturbed in first 10 years: 15.7% Mature shrub at 30 years: 25% **BFO:** Source Habitat disturbed in first 10 years: 12.4% Mature shrub at 30 years: 21%

[4] See full description of sagebrush guild species and their habitats in Chapter 3.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	Shoshone Field Office (SFO): Source Habitat disturbed in first 10 years: 0% Mature shrub at 30 years: 12%	**SFO:** Source Habitat disturbed in first 10 years: 0.0% Mature shrub at 30 years: 14%	**SFO:** Source Habitat disturbed in first 10 years: 2.3% Mature shrub at 30 years: 24%	**SFO:** Source Habitat disturbed in first 10 years: 8.5% Mature shrub at 30 years: 17%	**SFO:** Source Habitat disturbed in first 10 years: 8.5% Mature shrub at 30 years: 17%
WUI Areas of Concern	Low Risk areas: 15 Moderate Risk areas: 15 High Risk areas: 4 Least amount of treatment in, and adjacent to, the WUI areas would result in: - Continued full-scale suppression as the primary tool in reacting to wildland fires, - Continued wildland fire damage to property, - Increased financial and labor costs, and - Risk to public and fire-fighter health and safety.	Low Risk areas: 27 Moderate Risk areas: 6 High Risk areas: 1 Those WUI areas that receive the most treatments would result in cover types that: - Are more resilient to wildland fire, - Have reduced fuel loads, and, therefore, fire intensity, and - Pose less risk to WUI areas. If treatment involves WFU and RxFire, there would be some risk to the public and fire fighter health and safety, though it would be expected that the effects of treatment would reduce the incidence of uncharacteristic wildland fire by reducing fuel	Low Risk areas: 29 Moderate Risk areas: 5 High Risk areas: 0 Same as Alternative B.	Low Risk areas: 29 Moderate Risk areas: 4 High Risk areas: 1 Similar to Alternative B with the exception that Alternative D focuses on Low- and Mid-elevation Shrub, Perennial Grass, and Invasive Annual Grass cover types.	Low Risk areas: 30 Moderate Risk areas: 4 High Risk areas: 0 Similar to Alternative B.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
		load, increasing defensible space, and restoring cover types where feasible.			
Wildlife	- 250,240 footprint-acres under this alternative would be unavailable to wildlife for portions of the following 10 years. However, areas being rehabilitated or restored would continue to provide habitat value to certain species, particularly those that utilize early to mid-seral stages. - FRCC in Invasive Annual Grass, Perennial Grass and Low-Elevation Shrub would remain at 2 with corresponding moderate risk to wildlife guilds using these cover types. - Mid-elevation Shrub, Juniper, and Mountain Shrub would remain in FRCC 3 with higher risk of long-term adverse impacts to wildlife guilds using these cover types.	- 646,050 footprint-acres under this alternative would be unavailable to wildlife for portions of the following 10 years. However, areas being rehabilitated or restored would continue to provide habitat value to certain species, particularly those that utilize early to mid-seral stages. -FRCC in Invasive Annual Grass, Perennial Grass and Low-elevation Shrub would remain at 2 with corresponding moderate risk to wildlife guilds using these cover types. - Mid-elevation Shrub and Juniper would range from 2 to 3 across the planning area with moderate and high risk to species using these cover types.	- 1,686,528 footprint-acres under this alternative would be unavailable to wildlife for portions of the following 10 years. However, areas being rehabilitated or restored would continue to provide habitat value to certain species, particularly those that utilize early to mid-seral stages. -FRCC in Invasive Annual Grass, Perennial Grass and Low-elevation Shrub would remain at 2 with corresponding moderate risk to wildlife guilds using these cover types. - Mid-elevation Shrub and Juniper would be FRCC 1 across the planning area with low risk to species using these cover types.	- 1,522,270 footprint-acres under this alternative would be unavailable to wildlife for portions of the following 10 years. However, areas being rehabilitated or restored would continue to provide habitat value to certain species, particularly those that utilize early to mid-seral stages. - FRCC in Invasive Annual Grass, Perennial Grass and Low-elevation Shrub would remain at 2 with corresponding moderate risk to wildlife species using these cover types. - Mid-elevation Shrub and Juniper would have an FRCC of 2 across the planning area with moderate risk to species using these cover types.	- 1,538,022 footprint-acres under this alternative would be unavailable to wildlife for portions of the following 10 years. However, areas being rehabilitated or restored would continue to provide habitat value to certain species, particularly those that utilize early to mid-seral stages. - FRCC in Invasive Annual Grass, Perennial Grass and Low-elevation Shrub would remain at 2 with corresponding moderate risk to wildlife species using these cover types. - Mid-elevation Shrub and Juniper would have an FRCC of 2 across the planning area with moderate risk to species using these cover types.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
		- Mountain Shrub would range from FRCC 2 to 1 across the planning area with moderate-to-low risk to species using this cover type.	- Mountain Shrub FRCC would range from 3 to 1 with low-to-moderate risk to species using this cover type.	- Mountain Shrub FRCC would range from 2 to 3 with moderate-to-high risk to species using this cover type.	- Mountain Shrub FRCC would range from 3 to 1 with moderate-to-high risk to species using this cover type.
	- Aspen/Conifer and Dry Conifer FRCC would vary from 2 to 3 throughout the planning area with corresponding moderate-to- high risk to wildlife habitat in these cover types.	- Aspen/Conifer and Dry Conifer FRCC would vary from 2 to 3 throughout the planning area with corresponding moderate risk to wildlife habitat in these cover types.	- Aspen/Conifer and Dry Conifer FRCC would be 1 to 2 throughout the planning area with corresponding moderate-to-high risk to wildlife species in these cover types.	- Aspen/Conifer and Dry Conifer FRCC would be 3 throughout the planning area with corresponding high risk to wildlife species in these cover types.	- Aspen/Conifer and Dry Conifer FRCC would be 1 to 2 throughout the planning area with corresponding moderate-to-high risk to wildlife species in these cover types.
	- Salt Desert Shrub, Riparian, and Vegetated Rock/Lava would remain in FRCC 1 with low risk to wildlife species using these cover types.	- Salt Desert Shrub, Riparian, and Vegetated Rock/Lava would remain in FRCC 1 with low risk to wildlife species using these cover types.	- Salt Desert Shrub, Riparian, and Vegetated Rock/Lava would remain in FRCC 1 with low risk to wildlife species using these cover types.	- Salt Desert Shrub, Riparian, and Vegetated Rock/Lava would remain in FRCC 1 with low risk to wildlife species using these cover types.	- Salt Desert Shrub, Riparian, and Vegetated Rock/Lava would remain in FRCC 1 with low risk to wildlife species using these cover types.
Special Status Plants	Under all alternatives, site-specific project effects on special status plants would be evaluated in light of the status of the taxa, population health and integrity, ecology and response to disturbance, and habitat quality.				
	Low-elevation Shrub, Perennial Grass, Invasive Annual Grass:	*Low-elevation Shrub, Perennial Grass, Invasive Annual Grass:*	*Low-elevation Shrub, Perennial Grass, Invasive Annual Grass:*	*Low-elevation Shrub, Perennial Grass, Invasive Annual Grass:*	*Low-elevation Shrub, Perennial Grass, Invasive Annual Grass:*
	- Would treat approximately 6% of cover types to benefit special status plant habitat by reestablishing the structure, species composition, and seral dynamics of the native cover type.	- Would treat approximately 12% of cover types to benefit special status plant habitat by reestablishing the structure, species composition, and seral dynamics of the native cover type.	- Would treat approximately 37% of cover types to benefit special status plant habitat by reestablishing the structure, species composition, and seral dynamics of the native cover type.	- Would treat approximately 30% of cover types to benefit special status plant habitat by reestablishing the structure, species composition, and seral dynamics of the native cover type.	- Same as Alternative D. - RxFire on approximately 500,000 acres would benefit species that require open light and openings in early to mid-seral stages.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	- RxFire on approximately 14,000 acres would benefit species that require open light and openings in early to mid-seral stages. Species characteristic of late seral stages would possibly be less tolerant of burning treatments due to shading or nutrient requirements. *Mid-elevation Shrub, Juniper, including areas of juniper encroachment:* - SSS that occur on relatively fire-resistant, sparsely vegetated, rocky sites would not be impacted. - Would treat approximately 3% of cover types with benefits dependent upon seral stage status and tolerance to fire, as well as competitive ability and shade tolerance. Potential negative long-term effects would be due to lack of treatment and continued degradation of habitat.	- WFU and RxFire on approximately 320,000 acres would benefit species that require open light and openings in early to mid-seral stages. Species characteristic of late seral stages would possibly be less tolerant of burning treatments due to shading or nutrient requirements. *Mid-elevation Shrub, Juniper, including areas of juniper encroachment:* - Same as Alternative A. - Would treat approximately 15% of cover types with benefits dependent upon seral stage status and tolerance to fire, as well as competitive ability and shade tolerance. Potential negative long-term effects would be due to lack of treatment and continued degradation of habitat.	- WFU and RxFire on approximately 258,000 acres would benefit species that require open light and openings in early to mid-seral stages. Species characteristic of late seral stages would possibly be less tolerant of burning treatments due to shading or nutrient requirements. *Mid*-elevation *Shrub, Juniper, including areas of juniper encroachment:* - Same as Alternative A. - Would treat approximately 50% of cover types with benefits dependent upon seral stage status and tolerance to fire, as well as competitive ability and shade tolerance. Potential positive effects would be due to maintaining a seral community/or expanding potential habitat on a landscape scale.	- RxFire on approximately 500,000 acres would benefit species that require open light and openings in early to mid-seral stages. Species characteristic of late seral stages would possibly be less tolerant of burning treatments due to shading or nutrient requirements. *Mid-elevation Shrub, Juniper, including areas of juniper encroachment:* - Same as Alternative A. - Would treat approximately 28% of cover types with benefits dependent upon seral status and tolerance to fire, as well as competitive ability and shade tolerance. Potential positive effects would be due to maintaining a seral community/or expanding potential habitat on a landscape scale.	Species characteristic of late seral stages would possibly be less tolerant of burning treatments due to shading or nutrient requirements. *Mid-elevation Shrub, Juniper, including areas of juniper encroachment:* - Same as Alternative A. - Would treat approximately 28% of cover types with benefits dependent upon seral status and tolerance to fire, as well as competitive ability and shade tolerance. Potential positive effects would be due to maintaining a seral community/or expanding potential habitat on a landscape scale.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	Salt Desert Shrub: - Would treat approximately 3% of cover type. Unlikely that treatments would impact any special status plant populations.	*Salt Desert Shrub:* - No treatment proposed. No impact to any special status plant populations.	*Salt Desert Shrub:* - Same as Alternative B.	*Salt Desert Shrub:* - Same as Alternative B.	*Salt Desert Shrub:* - Same as Alternative B.
	Aspen/Conifer and Dry Conifer: - Would treat approximately 3% of cover types with benefits dependent upon the seral stage status, tolerance to fire, competitive ability, and shade tolerance.	*Aspen/Conifer and Dry Conifer:* - Would treat approximately 21% of cover types with benefits dependent upon the seral stage status, tolerance to fire, competitive ability, and shade tolerance.	*Aspen/Conifer and Dry Conifer:* - Would treat approximately 14% of cover types with benefits dependent upon the seral stage status, tolerance to fire, competitive ability, and shade tolerance.	*Aspen/Conifer and Dry Conifer:* - No treatment proposed. Unlikely to impact any special status plant populations though may indirectly impact SSS that require openings in the Aspen vegetation cover type.	*Aspen/Conifer and Dry Conifer:* - Same as Alternative C.
	Mountain Shrub: - Would treat approximately < 1% of cover type with benefits dependent upon seral stage status, tolerance to fire, competitive ability, and shade tolerance. Potential negative long-term effects would be due to lack of treatment and continued degradation of habitat.	*Mountain Shrub:* - Would treat approximately 9% of cover type with benefits dependent upon seral stage status, tolerance to fire, competitive ability, and shade tolerance. Potential negative long-term effects would be due to lack of treatment and continued degradation of habitat.	*Mountain Shrub:* - Would treat approximately 42% of cover type with benefits dependent upon seral stage status, tolerance to fire, competitive ability, and shade tolerance. Potential positive effects would be due to maintaining a seral stage and/or expanding potential habitat on a landscape scale.	*Mountain Shrub:* - Would treat approximately 13% of cover type with benefits dependent upon seral stage status, tolerance to fire, competitive ability, and shade tolerance. Potential positive effects would be due to maintaining a seral stage and/or expanding potential habitat on a landscape scale.	*Mountain Shrub:* - Would treat approximately 13% of cover type with benefits dependent upon seral stage status, tolerance to fire, competitive ability, and shade tolerance. Potential positive effects would be due to maintaining a seral stage and/or expanding potential habitat on a landscape scale.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	Wet/Cold Conifer: There are no special status plant species associated with the Wet/Cold Conifer cover type. *Riparian*: It is not anticipated that areas supporting special status plants would be treated, unless site-specific information indicates that small-scale RxFire use would maintain a seral stage beneficial to the taxa. *Vegetated Rock/Lava*: No treatment proposed. Unlikely to impact any special status plant populations.	*Wet/Cold Conifer*: Same as Alternative A. *Riparian*: No treatment proposed. No impact to any special status plant populations. *Vegetated Rock/Lava*: Same as Alternative A.	*Wet/Cold Conifer*: Same as Alternative A. *Riparian:* Same as Alternative A. *Vegetated Rock/Lava*: Same as Alternative A.	*Wet/Cold Conifer*: Same as Alternative A. *Riparian:* Same as Alternative B. *Vegetated Rock/Lava*: Same as Alternative A.	*Wet/Cold Conifer*: Same as Alternative A. *Riparian:* Same as Alternative B. *Vegetated Rock/Lava*: Same as Alternative A.
Air Quality	Emissions (tons/10-years): - PM_{10} 1,463 - $PM_{2.5}$ 1,233	Emissions (tons/10-years): - PM_{10} 20,235 - $PM_{2.5}$ 17,054	Emissions (tons/10-years): - PM_{10} 26,172 - $PM_{2.5}$ 21,797	Emissions (tons/10-years): - PM_{10} 9,052 - $PM_{2.5}$ 7,468	Emissions (tons/10-years): - PM_{10} 12,473 - $PM_{2.5}$ 10,371
Soil Resources	Least amount of water and wind erodible soils disturbance (37,987 and 154,731 acres, respectively).	Would disturb 98,068 acres of water erodible soils and 399,471 acres of wind erodible soils.	Most amount of water and wind erodible soils disturbance, 256,010 and 1,042,829 acres, respectively.	Would impact 231,076 acres of water erodible soils and 941,263 acres of wind erodible soils.	Would impact 233,467 acres of water erodible soils and 951,003 acres of wind erodible soils.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Water Resources	Less than 1% of the proposed treatments in all cover types would occur on water-erodible soils. Thus, overall, short-term impacts to water resources would be negligible across the planning area.	Approximately 7% of the proposed treatments for all cover types would occur on wind-erodible soils, while less than 2% would occur on water-erodible soils, with accompanying risk of sedimentation and short-term impacts to water quality in the planning area.	Approximately 19% of the proposed treatments for all cover types would occur on wind-erodible soils, while approximately 5% would occur on water-erodible soils, resulting in accompanying risk of sedimentation and short-term impacts to water quality in the planning area.	Approximately 17% of the proposed treatments for all cover types would occur on wind-erodible soils, while approximately 4% would occur on water-erodible soils, resulting in accompanying risk of sedimentation and short-term impacts to water quality in the planning area.	Approximately 18% of the proposed treatments for all cover types would occur on wind-erodible soils, while approximately 4% would occur on water-erodible soils, resulting in accompanying risk of sedimentation and short-term impacts to water quality in the planning area.
Livestock Grazing Management	Would result in approximately 47,500 AUMs (0.7%) being temporarily unavailable annually.	Would result in approximately 122,783 AUMs (1.8%) being temporarily unavailable annually.	Would result in approximately 320,467 AUMs (4.8%) being temporarily unavailable annually.	Would result in approximately 289,268 AUMs (4.3%) being temporarily unavailable annually.	Would result in approximately 292,242 AUMs (4.4%) being temporarily unavailable annually.
Recreation	Could have direct impacts by decreasing public access to recreational areas during treatment and recovery periods.	Would have short-term direct impacts by decreasing access to more recreational areas during treatment and recovery periods than Alternative A.	Would have short-term direct impacts by decreasing access to more recreational areas during treatment and recovery periods more than for any of the other alternatives. Dispersed recreation, such as hunting and all-terrain vehicle riding, could be adversely affected in the short term through decreased access to treated areas.	Would have short-term direct impacts by decreasing access to recreational areas during treatment and recovery periods at levels close to Alternative C. Dispersed recreation, such as hunting and all-terrain vehicle riding, could be adversely affected in the short term through decreased access to treated areas.	Would have short-term direct impacts by decreasing access to recreational areas during treatment and recovery periods at levels close to Alternative C. Dispersed recreation, such as hunting and all-terrain vehicle riding, could be adversely affected in the short term through decreased access to treated areas.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Wilderness	Treatments in Wilderness Study Areas that follow the guidance in BLM handbook H-8551 (Interim Policy for Lands Under Wilderness Review) would not impair wilderness values under any alternative.				
	Effects of current direction's full wildland fire suppression would not result in any short-term, discernible change from current conditions.	Treatments in Vegetated Rock/Lava (approximately 50% of the WSAs) would only include WFU. The remaining cover types that are within Wilderness Study Areas would receive, in general, approximately 2.6 times more treatment than under Alternative A. Treatment impacts may be perceived to decrease the wilderness values of these Wilderness Study Areas in the short term.	Anticipated treatment impacts would be similar to those under Alternative B for Vegetated Rock/Lava cover types. The remaining cover types that are within Wilderness Study Areas would, in general, be 6.7 times more likely to receive treatment than under Alternative A.	There are no treatments proposed in Vegetated Rock/Lava. The remaining cover types that are within Wilderness Study Areas would, in general, be 6.1 times more likely to receive treatment than under Alternative A.	Impacts to WSAs would be the same as those described for Alternative C.
Visual Resources	Views from key viewpoints would be maintained in FRCC 3 with the exception of some portions of the Ohio Gulch viewshed that would be FRCC 2. This would result in moderate-to-high visual quality degradation from atmospheric particulates and large-scale landscape scorching as seen from these viewpoints.	Views from key viewpoints would be maintained in FRCC 3 with the exception of Appendicitis Hill Wilderness Study Area viewshed, where vegetation could move to FRCC 2, resulting in lessened potential for visual quality degradation.	Views from key viewpoints would be maintained in FRCC 1 with the exception of some portions of the Appendicitis Hill Wilderness Study Area, which would remain in FRCC 2. This would result in substantially reduced potential for major visual quality degradation from atmospheric particulates and large-scale	Views from key viewpoints would be maintained in FRCC 3, 2, and 1 with similar visual impacts to those described for Alternative B.	Views from key viewpoints would be maintained in FRCC 3, 2, and 1 with similar visual impacts to those described for Alternative B.

TABLE 2-15. SUMMARY OF ALTERNATIVE EFFECTS-ISSUE 2

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
			landscape scorching as seen from these viewpoints.		
Cultural Resources and Native American Tribal Concerns	An estimated 250,200 footprint-acres would be subject to mechanical treatment, chemical treatment, RxFire, or seeding over a 10-year period. However, standard BLM practice entails measures such as pre-action inventory and avoidance that would likely mitigate these impacts.	An estimated 646,000 footprint-acres in most cover types would be treated over a 10-year period. However, standard BLM practice entails measures such as pre-action inventory and avoidance that would likely mitigate these impacts.	An estimated 1,687,000 footprint-acres would be treated over a 10-year period, resulting in a corresponding increase in risk to cultural resources or Tribal concerns. However, standard BLM practice entails measures such as pre-action inventory and avoidance that are expected to mitigate these impacts.	An estimated 1,522,000 footprint-acres would be treated over a 10-year period. Impacts would be similar to those described for Alternative C.	An estimated 1,538,000 footprint-acres would be treated over a 10-year period. Impacts would be similar to those described for Alternative C.
Socioeconomics	-The loss of revenue to the BLM in the form of grazing fees would be $65,075 over the next 10-year period. -Total fire management costs over the next 10-years would be approximately $107 million, of which approximately $37 million would be funneled into the local economy.	-The loss of revenue to the BLM in the form of grazing fees would be $168,213 over the next 10-year period. -Total fire management costs over the next 10-years would be approximately $114 million, of which approximately $40 million would be funneled into the local economy.	-The loss of revenue to the BLM in the form of grazing fees would be $439,040 over the next 10-year period. -Total fire management costs over the next 10 years would be approximately $199 million, of which approximately $70 million would be funneled into the local economy.	-The loss of revenue to the BLM in the form of grazing fees would be $396,297 over the next 10-year period. -Total fire management costs over the next 10 years would be approximately $184 million, of which approximately $64 million would be funneled into the local economy.	-The loss of revenue to the BLM in the form of grazing fees would be $400,371 over the next 10-year period. -Total fire management costs over the next 10 years would be approximately $185 million, of which approximately $65 million would be funneled into the local economy.